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The BULLETIN

of the

AMERICAN HOSPITAL ASSOCIATION

APRIL
1934
Volume VIII
Number 4

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Vol. VIII *April, 1934* No. 4

The BULLETIN

of the

AMERICAN HOSPITAL ASSOCIATION

Incorporated

A monthly official publication devoted to the discussion of Association affairs and to subjects of interest to hospitals and allied institutions

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Editorial and General Offices
18 East Division Street, Chicago, Illinois
Publication Office. 210 S. Desplaines St., Chicago

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VOL. VIII. THE BULLETIN OF THE AMERICAN HOSPITAL ASSOCIATION No. 4

Editor, BERT W. CALDWELL, M. D., *Executive Secretary.*

Executive, Editorial, and Business Offices, AMERICAN HOSPITAL ASSOCIATION, 18 East Division St., Chicago, Ill.

Published monthly at 210 S. Desplaines St., Chicago, Ill.

Entered as second class matter March 19, 1930, at post office at Chicago, Illinois, under the Act of March 3, 1879.

Subscription rate, $2.00 a year. (*Foreign postage extra.*)

E·D·I·T·O·R·I·A·L·S

Reconstruction Finance Corporation Loans to Hospitals

THERE has been introduced into the House of Representatives, by the Hon. John J. Cochran of Missouri, House Rule 7804, and by the Hon. Roscoe C. Patterson and the Hon. Bennett C. Clark, United States Senators from Missouri, S. 2640, authorizing and empowering the Reconstruction Finance Corporation "to make loans under the Reconstruction Finance Corporation Act, as amended, to any public or private hospital organized under the laws of any State upon the same terms and conditions, and subject to the same limitations, as are applicable in the case of loans to financial institutions specified in section 5 of such Act, as amended."

This amendment to the Reconstruction Finance Corporation Act is of very large importance to our hospitals. It would open the door through which many of them could refinance a portion, if not all, of their capital indebtedness and could secure the funds necessary for their continued operation. In a great many instances hospitals have been large borrowers of capital at comparatively high rates of interest. Their monies have been invested in plant and equipment to enable them to render a better service to the sick of their communities and to extend their services to the indigent. By and large, hospitals could offer as sound security for any loans negotiated with the Reconstruction Finance Corporation as other organizations which have been able to secure such loans. Most hospitals could furnish ample security which in normal times would be accepted by banks, insurance companies, and other loaning agencies. The loans, when and as made under the provisions of this law, would be paid in full at or before maturity.

These bills are now before the Committee on Banking and Currency of the House and of the Senate. A favorable report from these committees would in all probability insure favorable action by Congress. Our hospitals are urged to support this legislation in the interests of the entire hospital field. A short letter addressed to each member of the Committee

on Banking and Currency of both the Senate and the House of Representatives, as well as to the individual Members of Congress, would carry a great deal of weight and would probably insure the passage of this very important piece of legislation.

National Hospital Day in 1934

THE FACT that this year the Columbia Broadcasting System will arrange a full hour for our National Hospital Day program over its network would certainly indicate the success of our 30-minute radio broadcast last year. If we can assume that the local programs of the various participating hospitals and associations were as successful in their respective communities, it is quite apparent that each year more and more people are coming to recognize the importance of National Hospital Day and its educational purpose—that of promoting a better understanding of the problems and activities of the modern hospital by the community which it serves.

This unified effort to acquaint the public with facts, and thereby dispel some of the groundless prejudices against hospitals which misinformed people sometimes develop, was inaugurated in 1921 by a National Hospital Day Committee appointed by the American Hospital Association. Coöperating with the Committee on Public Education, it has been virtually the annual culmination of the entire public relations program for the year. Newspaper releases, magazine articles, radio talks, addresses before civic clubs, high schools, and parent-teacher associations, tours of the hospital, motion pictures—all are phases of the publicity campaign planned by the Public Education Committee in its effort to keep the public "hospital conscious" throughout the entire year. By setting aside May 12 as a particular date to concentrate on these various methods and to focus attention on hospitals, the American Hospital Association has done much to inform the layman and educate our communities in the interests of hospitals.

The choice of the anniversary of the birth of Florence Nightingale as our National Hospital Day was an appropriate one, for it is particularly fitting that an entire nation should pay homage to the memory of one whose life was devoted to the relief of human suffering. In addition to introducing new methods in nursing, "The Lady with the Lamp" was a

pioneer in modern hospital methods, founding St. Thomas's and King's College Hospitals in London.

If, therefore, the observance of National Hospital Day continues to grow steadily as it has since its inception in 1921, in what ways will it eventually benefit members of the American Hospital Association? There are several definite benefits that accrue as the hospital "sells itself" to the community. The creation of good will in this way would simplify the other work of the Committee on Public Education, assuring it a more sympathetic public for its educational program. Once the interest of a group has been aroused, half the effort of education is accomplished. In the words of Dr. G. F. Stephens, Past-President of the American Hospital Association, "To be seen and understood, in the case of the hospitals, is to be appreciated."

Another significant point to be considered as a result of good will on the part of the public is that of potential endowments. Not that National Hospital Day should be considered a donation day, nor linked in any way with the solicitation of financial aid. But having furnished the community with facts concerning your hospital, its work, its service and ideals, there will be individuals who have money to invest in a worthy philanthropy who will be convinced that funds intrusted to you and your institution will be properly administered.

A third probable result of this increased National Hospital Day publicity is more subjective in aspect. As people become more informed they will come to realize that the modern hospital is not a gloomy, depressing place to dread, but rather comfortable and even cheerful. They will be more apt to expect great things of the institution, and this increased interest will serve as a challenge to the individual hospital to maintain its high standards of administration and service.

Group Hospitalization

IT WAS very gratifying to note that the March 31 issue of *The Literary Digest* carries a full page summary of the development of group hospitalization throughout the United States. This article outlines the development of group budgeting for hospital care and its rapid growth during the past year, since the American Hospital Association endorsed the plan and outlined principles and standards under which it should be conducted.

The Literary Digest carries photographs of Dr. N. W. Faxon, President of the Association, and Dr. S. S. Goldwater, chairman of the Council

on Community Relations and Administrative Practice and Commissioner of Hospitals of New York City.

The publication of this article will undoubtedly result in increased interest throughout the United States among hospital trustees and among groups of employed persons and the general public.

Hospital executives who have not already done so should familiarize themselves with group hospitalization through the offices of the Association. The principle of group budgeting for hospital care is not only of interest to hospital executives, but has also become a problem of wage-earners and the public as a whole.

The Joint Committee's Activities in Washington

THE Joint Committee of the National Hospital Associations has been untiring in its efforts in the interests of the hospitals. It has succeeded in many places and failed in others. On the whole, its work has been commendably successful and has saved each hospital a great deal of money. The Joint Committee has successfully opposed legislation that would have added a great deal to the financial burdens of our hospitals, and the establishing of regulations the application of which would have caused serious inconvenience to each institution.

Notable among the successes of the Joint Committee were its labors before the Agricultural Department on the milk and other codes and with the National Recovery Administration, under General Johnson, on the industrial codes, and the promised exemption of the hospitals from the provisions of Senator Wagner's bill for unemployment, which would have meant an excise tax of about 5% of 90% of the hospital payroll to meet its provisions. The Joint Committee secured the agreement for the reimbursement of the hospitals for CWA patients.

The Joint Committee is continuing its efforts to secure Federal participation in the reimbursement of hospitals for the care of indigent, transient, and unemployed. So far it has not been successful, and the probabilities seem to be against favorable action at this time. It is interested in the legislation which will liberalize the powers of the Reconstruction Finance Corporation in making loans to our hospitals.

The Joint Committee will continue its efforts throughout this session of Congress and after Congress has adjourned, in securing the best possible interpretation of rules or regulations applying to hospitals by the various administrative departments of the Government.

The Institute for Hospital Administrators—1934

THE American Hospital Association is very much concerned in affording an opportunity to those hospital administrators who so desire to have increased educational advantages in the field of hospital administration. It is concerned not so much with how large a job it can do along these lines, but with how great a service it can extend toward administrative training.

To this end the Association, in coöperation with the University of Chicago and the Chicago hospital group, will conduct an Institute for Hospital Administrators in Chicago for two weeks in the early fall, probably in September. The courses outlined will be refresher courses and will consist of both didactic instruction and practical work in the field.

The Committee on Arrangements for the Institute is preparing a course of lectures for those attending which will be delivered by national authorities upon their respective subjects. In addition to this, administrative clinics will be held in different hospitals in Chicago and Round Tables will be conducted, with able leaders, for small, selected groups during the entire two weeks of the Institute.

The value of these refresher courses to the hospital administrator is evidenced by the popularity of the Institute in 1933 and by the number of inquiries and enrollments for the Institute this year.

The American Hospital Association is particularly fortunate in securing the coöperation of the School of Business of the University of Chicago and the member hospitals of the Chicago group in arranging an Institute which will have a high educational value to those who enroll, and will make a definite contribution to the profession of hospital administration.

Relations of Hospitals to Public Health

MICHAEL M. DAVIS, PH.D.

Director for Medical Services, Julius Rosenwald Fund

THE SUBJECT this morning is the relation of hospitals to public health. From the point of view of internal administration, the daily work consists of the admission, treatment, and discharge of patients and from that point of view, a hospital is a hotel for the sick.

But from another point of view a hospital is a part of the community and its relationships to other community agencies have to be considered and adjusted. Historically and logically a hospital is a community institution, growing out of the desire for service to others. Hospitals are supported largely because of the public service they render; a large share of the three billion dollars' capital invested in their buildings and equipment has been provided by taxes, or by philanthropic gifts.

So, in the main, hospitals are owned by the public. Less than 10% of their capital and less than 10% of the beds of the hospitals of the United States are established on a business basis for profit.

Now, the hospital's responsibilities to the public are numerous. Dr. MacEachern, in an address later on in this course, will speak upon the public relations of the hospital and chiefly its relationships to the press and education. Mr. Samuel Goldsmith will speak particularly on the relation between hospitals and social agencies. You are all familiar with the close relation that hospitals have to industry, for example, in compensation cases, and to public schools in the work done for school children.

I must review, very briefly, some of the chief kinds of public health agencies. First and foremost, of course, is the health department—the health departments of the city, county, or state, and the United States Public Health Service. Voluntary health agencies are found in almost every large community, such as a local tuberculosis association, a child welfare committee or society, and a social hygiene society. There are branches of the American Society for the Control of Cancer, branches of the National Committee for Mental Hygiene, and visiting nurse associations.

These voluntary bodies carry on one or another form of public health work, while the health department, supported by the public by taxes, is, of course, the main health agency.

Now, what are the functions of the health department? A health department has the sanitary control of the life of the community. It has responsibility for the control of communicable diseases. It has responsi-

Read before the Institute for Hospital Administrators, Chicago, September 25, 1933.

bility for collecting statistics of births and deaths, some of which come from the hospitals. It has responsibility for controlling or preventing certain diseases or conditions, notably tuberculosis, and lowering infant mortality. It has some responsibility in regard to controlling diseases and defects of school children. It has responsibility for certain laboratory services and numerous other activities.

How does the hospital relate to these various activities? What health responsibilities has the hospital as distinguished from its responsibilities for the care of sick people who come into its beds or its operating room? By health responsibilities, I mean the prevention or control of disease.

First of all, the hospital has a preventive responsibility to its own personnel. May I ask how many here have systematic, that is, periodic, examinations for the hospital personnel in your own hospital? And if you do, does that mean everybody—not just the nurses?

For a hospital, the systematic examination of personnel and careful attention to the hygiene of hospital buildings and living quarters are of great importance. A practical difficulty is the fact that a great many physicians at the present time are not much interested in the early symptoms of disease or "supposedly well" people. This partly explains why the periodic examination is not practiced by many adults and not carried on by many physicians in their private practice.

A physician in one town also took care of all sicknesses of hospital personnel, but when it was suggested to him that it would be a good plan to give them a periodic examination, he asked, "Why, what for? These people are not sick." That is the natural reaction of a man who has been in practice for some 30 years. And with that point of view, even while he might accept the idea of a periodic examination of all personnel, if he were to make them in that hospital himself, he probably wouldn't do it very well. The secret of periodic examination is to be able not only to find minor conditions, but also to advise the patients about hygiene.

The next responsibility of a hospital in its health relations is follow-up work on discharged bed cases needing after-care, particularly when the after-care may mean rest, absention from work, etc. This may be carried out in part through the out-patient department, in part through social service, in part by visiting nursing, but above all, through the interest and thought which the physician gives the case at the time of the discharge of the patient.

The out-patient department is a means through which much preventive work can be done by the hospital. It enables patients to be diagnosed in earlier stages of many diseases than if they were not seen by a physician until they had been put to bed. Among illustrations are many respiratory

conditions, some forms of heart disease, tuberculosis, and cancer. One physician in New York figured up that by reason of the development of the out-patient cardiac service at Bellevue as contrasted with the former policy, they had saved the city about $280,000 a year on that one cardiac service alone, because they were treating a large group of cases on an ambulatory basis instead of treating only a fraction of them on a bed basis.

As to specific ways in which hospitals can and do coöperate with health departments or health agencies: (*a*) They may give an opportunity to the local visiting nurse association to have an office in the hospital building with a nurse in charge there daily or for an hour or more. (*b*) They may coöperate with local tuberculosis societies through tuberculosis clinics, the display of posters, the holding of conferences and talks. And the same is true in relation to maternity clinics and to child health work. (*c*) They may coöperate in the treatment of venereal diseases with the health department or a local social hygiene committee by holding out-patient clinics (which are sometimes paid for in whole or in part by the state or the local health department).

There are other illustrations: A hospital maintains a venereal disease or tuberculosis clinic in which the local health department provides nursing service. This relieves the hospital of that share of the expense or a hospital may have a member of its medical staff and one of its nursing staff go to the health department office in which the clinic is maintained. There are sometimes cash payments in lieu of service from health departments to hospitals, for infant welfare, child health, prenatal, venereal, and tuberculosis clinics.

Another valuable relation of hospitals to public health is in connection with communicable disease. An independent communicable disease hospital is an expensive proposition, as you all know, mainly because it is insufficiently utilized except in epidemics. In most of the smaller cities, this problem could be solved by the hospitalization of communicable disease patients in beds in general hospitals, in certain sections, properly equipped. There should be definite payments to the hospital from the health department for this service. This policy has been endorsed by the American Hospital Association and the American Public Health Association. This plan of making certain beds in a general hospital available for communicable disease patients may present difficulties, such as the construction of the isolation unit, which must be properly planned. An adequate technique for handling infectious patients must be maintained. The local public may fear the hospital that has contagious cases. But the plan has great advantages and, in the long run, I think, will extend generally.

Another coöperative service is laboratory work. The health department sometimes sets up a laboratory in a hospital or pays a hospital for doing

certain work in its laboratory. New York State has a regular arrangement of that kind which is mutually advantageous for the hospitals and the health departments. In a small city, the city or the county may pay the hospital for doing this, or, on the other hand, small hospitals may send certain kinds of their work in to the health department in a neighboring city and get the reports back.

There are problems in bringing about this coöperation between health departments or other health agencies and hospitals. There are problems in destroying public fear or ignorance about communicable diseases. There are jealousies between health officers and hospitals, and rivalry between individual hospitals in the same community, various difficulties and pitfalls which have to be looked out for.

I am going to pause now for a moment to see if there are any questions at this point.

Question: Can these forms of coöperation be carried out by a private hospital in a city where a county or city hospital exists?

Answer: Yes, I know of a number of places in which certain forms of coöperation that I have mentioned are done in voluntary hospitals in spite of the presence of a city or county hospital. Certain forms of coöperation involving the out-patient department, for example, are carried out because some city hospitals have no out-patient department. Or a county hospital may not operate a communicable disease hospital, sometimes because of a local situation.

Question: If there are hospital facilities for communicable diseases in a community, should the health officer expect anyone suffering from a communicable disease to go to the hospital?

Answer: Well, of course, every case of scarlet fever or diphtheria is not hospitalized. The health officer has the legal responsibility for deciding directly or through a deputy whether a case shall be hospitalized and he must decide that in terms of the communicability of the disease and the conditions under which it can be treated at home. If he decides it must be hospitalized the patient can be forcibly hospitalized under the law.

Question: [Not heard by stenographer.]

Answer: The question involved a county in which there were three voluntary hospitals, no tax-supported hospital, a considerable jealousy between the three hospitals or the physicians on their staff, a health officer on part time (a practicing physician, paid a small amount for public health work). It is said that the hospitals will not unite and get anything done.

In a good many places, a condition like that is a matter of personalities, and there are only two things to do to difficult personalities. One is to

change them; the other is to remove them. And a great many changes and reforms in our own institutions and in political life await the natural or the expedited demise of certain individuals.

Seriously, the only way to control these jealousies is by bringing pressure to bear from influential individuals or groups in the community.

Now, I don't know just what your condition is, but if there happens to be, say, an epidemic of scarlet fever, over which the public is stirred up, and you try to get discussion in the local newspaper and before the women's clubs and the Rotary Club about this serious menace to public welfare, if you need some beds set aside in one of the hospitals to hospitalize children with scarlet fever, you should start that move when the public mind is stirred up on the subject. You may need a publicity expert or a person who has the knack of catching people's attention and stirring up the public at the right time, and a good connection with a local newspaper.

This idea, of course, suggests the advantages of coöperative work among hospitals. Now, I know very well that the hospital superintendents in a city and the members of their staffs may have certain jealousies and frictions, so that it isn't always possible to get coöperative work among hospitals merely because the superintendents are willing to work together; but it is certainly true that unless the superintendents are willing to work together, you will never get very far. For this reason, some kind of inter-hospital organization of the local superintendents, meeting at regular intervals, or a fully organized hospital council, is very important in order to bring about the proper coöperation among hospitals in their joint dealings with the public.

A single small hospital in a town may find it possible to do its work better by establishing relationships with larger hospitals in the nearest center of population—relationships for assistance in diagnosis, for consultation, for specialist service at periodic intervals to aid the local physicians on certain types of cases. More and more it is becoming apparent that the small town and the rural area can only get really adequate medical service by the connection of their local hospital with public health activities of the area and with some larger center of hospital service in order that facilities which cannot be provided in a 25- or 35-bed hospital will yet be available to that community.

In some states, the state government itself through the health department will coöperate financially with local hospitals, furnishing advice and personnel. We must look forward to developing these community and public health relationships if we are to get the best medical service both in the large hospitals and in the very small ones. Medical facilities—hospitals, physicians, and nurses—are very unevenly distributed in the

United States. We have roughly, in a city like Chicago, one physician to every 500 people; in a rural area, about one to every 1,500; and there are sections in which there is but one physician to around 2,500 people. Hospital service is concentrated in cities to the extent of five or more hospital beds per thousand, with no beds in a thousand counties of the United States, and only one or two beds per thousand in many counties.

This great unevenness is partly a matter of wealth. Hospitals are built where there is money to build them. To a certain extent these differences can be evened up by coöperative arrangements, or by establishing local hospitals, but the small hospital can be first-class only when it has coöperative relations with other agencies through which to meet the patients' and doctors' needs. In the discussions which will follow some of these matters can be pursued.

DR. W. E. ROWLEY, of St. John, in an address before the New Brunswick Hospital Association, said:

"If you ask me what I consider the most valuable asset that any hospital can have I without hesitation say, a proper *esprit de corps*, running through all its component parts, governing body and administrative body, visiting staff, intern and nursing staffs, and even the domestic staff. Without this, fine buildings and equipment, brilliant physicians and surgeons, will fall far short of ideal achievement.

"No better motto could be found for any hospital than the simple words, 'we coöperate,' or 'one for all and all for one.'

"How would one define this *esprit de corps?* The purpose of a hospital is not to provide experience for its visiting or intern staffs, or to train nurses, or yet to provide any of its employees with a means of livelihood. Its only excuse for existence is the care and treatment of the sick. The advancement of medical science, which should be an aim in all hospitals, is merely one phase of treatment of the sick. When every thought and every action of every individual therein is towards the most perfect performance of this its proper function, then does a hospital have that *esprit de corps* which will make its name famous and blessed under the most adverse circumstances."

Children's Hospitals of the United States and Canada

Clifford G. Grulee, M.D.
George F. Munns, M.D.
Chicago

Introduction

Many phases of the work of the recent White House Conference on Child Health and Protection have been taken up and quite energetically followed by medical and lay groups. The problem of the child in the hospital has received comparatively slight consideration. Appropriately the American Academy of Pediatrics has made a study of this subject. In order to make a satisfactory study of the problem, the committee decided that it was necessary to have detailed information concerning the various children's hospitals in this country and Canada. Consequently there was obtained from the American Medical Association a complete list of the children's hospitals in these countries. Here we met our first difficulty. No one knew what could be classified strictly as a children's hospital. Several hospitals designated as children's hospitals were really tuberculosis sanatoria, or convalescent homes for children. Many of the so-called women's and children's hospitals were actually maternity hospitals in which the welfare of the child might be secondary in importance to the care of the mother. Several hospitals were excluded which in themselves were children's hospitals, but were a part of a general hospital. The committee finally, after appealing to the membership of the Academy for advice as to whether certain hospitals could be classed as children's hospitals, or were merely homes and sanatoria, chose rather arbitrarily the hospitals in the group which is here being presented. We are relatively certain that the 35 hospitals in this group represent all the large general children's hospitals in the United States and Canada and that they do not include orthopedic or contagious hospitals, convalescent homes for children, summer camps, or tuberculosis hospitals for children. An attempt, therefore, has been made, so far as possible, to limit this survey to a study of the general children's hospitals. The following is the list of hospitals finally agreed upon:

Children's Hospital, Los Angeles, California
Hospital for Children, San Francisco, California
Children's Hospital, Denver, Colorado
Children's Hospital, Washington, D. C.
Bobs Roberts Memorial Hospital, Chicago, Illinois

Children's Memorial Hospital, Chicago, Illinois
Sarah Morris Hospital, Chicago, Illinois
Cook County Hospital, Chicago, Illinois
James Whitcomb Riley Hospital, Indianapolis, Indiana
Children's Hospital, Iowa City, Iowa
Children's Hospital, Portland, Maine
Harriet Lane Hospital, Baltimore, Maryland
Boston Floating Hospital, Boston, Massachusetts
Children's Hospital, Boston, Massachusetts
Children's Hospital, Detroit, Michigan
Children's University Hospital, Ann Arbor, Michigan
Children's Memorial Hospital, Kansas City, Missouri
St. Louis Children's Hospital, St. Louis, Missouri
Children's Hospital, Buffalo, New York
Babies Hospital, New York City, New York
New York Foundling Hospital, New York City, New York
New York Nursery and Children's Hospital, New York City, New York
St. Mary's Hospital for Children, New York City, New York
Seaside Hospital, Staten Island, New York
Children's Hospital, Akron, Ohio
Children's Hospital, Cincinnati, Ohio
Babies' and Children's Hospital, Cleveland, Ohio
Children's Hospital, Columbus, Ohio
Children's Hospital, Philadelphia, Pennsylvania
Children's Hospital, Pittsburgh, Pennsylvania
Children's Orthopedic Hospital, Seattle, Washington
Milwaukee Children's Hospital, Milwaukee, Wisconsin
Montreal Children's Memorial Hospital, Montreal, Quebec, Canada
Toronto Hospital for Sick Children, Toronto, Ontario, Canada
Children's Hospital of Winnipeg, Winnipeg, Manitoba, Canada

Fully aware that the questionnaire method of obtaining information is not always entirely satisfactory, the committee could think of no other way to approach the subject in a manner any way adequate. If one resorts to the impressions obtained by personal contact, he is often forced to accept opinion rather than facts. By making use of the questionnaire method one obtains only facts. Often in dealing with institutions impressions are of more value than facts and occasionally traditions are more valuable than either of these. However, the mere physical side of a hospital is not the only thing which can be examined by the questionnaire method. By this method much can be discovered of the way in which the hospital is run and something of the ideals forming the background of its administration. The final form of the questionnaire was largely due to the coöperation and

advice of Dr. Philip Van Ingen, who had so much experience with questionnaires of all kinds during the recent White House Conference. After the questionnaire had been prepared and the hospitals chosen, each questionnaire was put in the hands of a member of the Academy associated with the particular hospital, with instructions that it was to be answered in detail. The task was carried out in every instance, and within four months all questionnaires had been answered and returned to the committee. The committee wishes to recognize this fine coöperation and to express its appreciation to these men.

After receiving and carefully tabulating the questionnaires, the various sections were separated and placed in the hands of experts in the respective fields, with the request that they criticize them. As we anticipated, much of the material which these experts wished was not obtained.

The committee did not feel that it was fair to ask the opinions of individuals directly connected with the particular hospital, as to the efficiency, or lack of it, in that hospital. While many of these opinions might be eminently fair, there is always the possibility and even the probability that no matter how strong the good intentions of the individuals may be, being human, he could have prejudices which would make it impossible to obtain an unbiased opinion. On the other hand it is difficult for one coming from the outside to sense the place in the community which the given institution holds and therefore the value of this opinion is impaired. We therefore concluded that the best we could do would be to gather facts and from these so far as was possible to deduce some idea of the organization, efficiency, and personality of the particular hospital. The result has not been entirely satisfactory but much valuable information has been obtained, as the present and subsequent articles will reveal.

Committee on Hospitals and Dispensaries of the American Academy of Pediatrics:

Chairman, Dr. Clifford G. Grulee, Evanston, Illinois
Secretary, Dr. George F. Munns, Winnetka, Illinois
Dr. Murray H. Bass, New York City, New York
Dr. L. R. DeBuys, New Orleans, Louisiana
Dr. Roger H. Dennett, New York City, New York
Dr. Henry Dietrich, Los Angeles, California
Dr. Lewis Webb Hill, Boston, Massachusetts

The committee wishes to acknowledge the assistance given it by Dr. Bert W. Caldwell, Executive Secretary, American Hospital Association, Mr. Homer F. Sanger, staff of the Council on Medical Education and Hospitals, American Medical Association, and Dr. G. Harvey Agnew, Secretary, Department of Hospital Service, Canadian Medical Association.

(Since the data for these reports were obtained, one hospital has been closed and has become part of a general hospital. The original figures, however, have been included in this report.)

A. *Professional Staff*

1. Attending staff

Since, as will be revealed later, nearly all the patients who go to children's hospitals are charity patients, it was not of so much importance to find out whether these hospitals had "open" or "closed" staffs. As a matter of fact, in 21 of the hospitals all patients in the wards came under the exclusive care of the attending staff. In two hospitals any accredited physician in good standing could send patients into the wards and treat them there. In 12 hospitals a limited number of physicians outside the attending staff could send patients to the wards, and in one instance this privilege was extended only to outstanding specialists. In other hospitals this courtesy was extended to members of the associate staff or former staff members. In six hospitals the courtesy was extended only for pay patients. The table below will give some idea concerning the attending staffs in these hospitals.

TABLE I.

HOSPITAL ATTENDING STAFFS

	Pediatric Staff	Otolaryngology	Orthopedics	Ophthalmology	Surgery	Neurology	*Psychiatry	†Psychology	Dermatology
Hospitals having	35	35	35	34	35	35	27	10	35
Total No. of members	4-38	2-16	1-10	..	2-20	1-6	..	..	1-5
With full-time staff 1 or more	9	0	0	0	0	0	0	0	0
Length of service in mos.	3-12	1-12	4-12	3-12	2-12	2-12	..	..	4-12
No. for 12 mos.	14	14	20	18	..	13	..	..	17
"On Call" only	0	0	6	8	2	7	5	7	7

	Dentistry	Oral Surgery	Oral Hygiene	X-Ray	Pathology	Allergy	Urology	Cardiology	Diabetes	Bronchoscopy
Hospitals having	33	30	25	34	35	21	8	2	1	1
Total No. of members	1-10	1-3	..	1-5	1-4	..	..	..	3	2
With full-time staff of 1 or more	0	0	0	0	0	0	0	0	0	0
Length of service in mos.	4-12	..	..	4-12	4-12	..	..	..	..	..
No. for 12 mos.	31	..	..	32	33	..	..	..	..	..
"On Call" only	6	3	..	4	4	12	6	..	..	..

*1 has facilities at Child Guidance Clinic.
3 combine neurology and psychiatry.
†12 others have arrangements for psychologic work.

It will be seen that in most instances the hospitals had provision for attending men in nearly every specialty which was needed, although comparatively few hospitals have staffs in psychiatry and psychology. In most instances provision was made for these services by other than attending men. Oral hygiene was frequently associated with dentistry, as was oral surgery. Since urology of children has taken such rapid strides within the last few years it is surprising to know that only 14 of the 31 hospitals have urologists. There were only nine of the hospitals that had any members on full time and these apparently were only in the pediatric staff. Where it was possible to determine, it was interesting to see what a large proportion of the hospitals have attending men for the full 12 months of the year and how few have even comparatively unimportant branches on call only. The committee feels that one to three months is too short a time to serve efficiently on any service and that six months should be the minimum period of service. Something may be said for an attendance which takes in six months of the year, but very little for any attendance of less than that time. This survey of the hospital staffs does not, of course, bring out the regularity of attendance nor the relative merits of the individuals employed. It is, of course, necessary for children's hospitals to take care of a larger number of pediatricians than would otherwise be the case if the children's departments in general hospitals were more adequate. For this reason services of less than six months in some instances are thought to be necessary in order that all men on the staff may have an opportunity to work in the wards. A hospital service of less than six months would certainly not be of any great value to anyone, least of all to the hospital. On the whole we may say that the evidence which is presented here as to the attending staffs indicates that not only are the pediatric staffs adequate in number, but that there is a marked tendency to encourage the work of the other specialties in children's hospitals and to consult with these specialists.

2. *House Staff*

a) Residents

Only three of the 35 hospitals have no residents. One had as many as six, one five, four four, one three, three two, and 21 one, making a total of 57. All hospitals which have residents pay them a salary, and this varies from $25 to $150 per month. Women are eligible in two of the hospitals and one hospital accepts only women as residents.

The length of service is one year in 28 of the hospitals and varies from three months to two years in others. The qualifications for residents vary greatly. In 16 hospitals, one year of general internship and one year of pediatric internship is required, while in five hospitals three or more years

of general and pediatric internship are required. Six hospitals require only one year of general internship, while one hospital requires only "previous hospital experience." Two hospitals require one year of general internship plus some pediatric experience. In contradistinction to these, one hospital required three years of pediatric internship.

In only 10 hospitals the resident does not have dispensary duties. The duties of a resident in the dispensary vary greatly in different hospitals and in one only is the resident in charge of the dispensary.

With respect to the resident, therefore, we see that there are provisions for 57 residencies in the 35 pediatric hospitals of this country and Canada, that the salary varies from $25 to $150 per month, that women are eligible to a large extent, and that the length of service in the average hospital is one year.

In view of the fact that the resident usually has considerable responsibility in the average hospital plan of pediatric care it is gratifying to note that 20 hospitals require two or more years of previous hospital experience before a physician may qualify for that position.

We seriously question whether one year of general internship properly prepares a man for a residency and feel that the minimum requirement should be one year of general internship and one year of pediatric internship or assistant residency.

About one-third of the hospitals report that the resident has no dispensary duties. Undoubtedly dispensary service is a very valuable factor in training a young man for future work in pediatrics and the resident should always have some duties there. Furthermore, his familiarity with the dispensary work will enable him to coördinate more efficiently the hospital and dispensary work.

b) Assistant residents

Twenty-four hospitals have assistant residents. The number varies from one to eight, the total being 72. In 20 of the 24 hospitals, assistant residents receive a salary, and this varies between $10 and $80 per month. Women are eligible for this position in 23 of the hospitals and in one hospital they alone are accepted. The length of service varies from three months to one year, but in 20 hospitals of the 24, the service is for one year. Qualifications for assistant resident are not quite so varying as those for resident. In 14 hospitals one year general internship is all that is required, while in nine, one year general and one year pediatric internship are required. One hospital requires a year of general internship with some pediatric training. In 16 of these hospitals, the assistant resident has general duties in the dispensary and in one he has optional duty.

We see, therefore, as regards assistant residents, that there are places for 72, which makes a grand total for residents and assistant residents of 129; that the salary for assistant residents varies from $10 to $80 per month; that the qualifications are, in general, a general internship or that plus a year's pediatric internship, and that assistant residents are employed in dispensaries less often than are residents.

c) Interns

Thirty of the children's hospitals have interns. The number varies from one to 15; five have 10 or more, 10 have five to 10, 15 have five or less. In all, these hospitals employ 184 interns. Only 11 of the hospitals pay salaries to interns and this varies from $40 a month down to less than $25. In only four hospitals are women ineligible and in only one are men ineligible. The length of the intern services varies from six weeks to one year, but in 19 of the 30 hospitals the service is for one year and in three for six months. In 26 of the hospitals the service is rotating. The time on each varies from two to four months. The qualifications for interns vary. In 10 hospitals only the M.D. degree is required, while in 12 a year's general internship is necessary. In four hospitals the interns rotate through the children's hospital from a general hospital service. In all but three of the hospitals, the interns have general duties in the dispensary.

We see, therefore, that in all there are employed 184 interns in 30 children's hospitals of this country and Canada. Presumably the other five hospitals have only residents. An intern service of less than six months can certainly be of no value and should be discarded. Happily, the number of these is decidedly few. Of the 184 internships, 62 or almost exactly one-third have a service of less than one year. Dispensary duty is carried out in almost every instance and we feel that this duty is a very valuable experience to all interns.

A general survey of the residents and interns will show that there are every year in the 35 children's hospitals 313 interns and residents, of which 251 have at least one year's training, the other 62 being interns with less than a year's service. Of course, it is altogether likely that many of the residents and assistant residents come up from the ranks of interns, but since the residents and assistant residents constitute only 129, the reduplication is not much. In all probability, we may say that there are to be turned out each year in the neighborhood of 200 men who have had at least a year's training as resident or intern in a children's hospital. This group alone would certainly be sufficient to replace all vacancies in the pediatric profession caused by death, illness, etc., and would leave a large number for influence on general practice or other specialties.

d) Educational activities

Some idea of the value of a hospital may be obtained by inquiring into its educational activities. Where hospitals are used for teaching purposes it has been found that the clinical and scientific work is much improved and such a hospital is an added asset to the community. Why hospitals in general have not seen this possibility and taken advantage of it is hard to account for.

Of the 35 children's hospitals, 22 are definitely associated with medical schools and four are loosely affiliated, so that more than two-thirds of the children's hospitals in the country are so used. Twenty-eight hospitals have clinics for medical students, 27 have ward walks, and five have clinical scholarships.

For the practicing physician, 19 hospitals offer clinics and one other offers clinics by courtesy and special arrangement. These clinics vary greatly, the most frequent ones coming weekly (in six hospitals). Ward walks for practicing physicians are held in 26 of the hospitals. Postgraduate instruction is offered in nine, in three of which the number of students is not limited. The others vary from four to 150. The total number enrolled for 1932 for these postgraduate courses was in the neighborhood of 250. The courses varied between two two-day courses to a course covering one year.

The instruction of the interns is carefully attended to in most of these hospitals, in fact, clinical conferences are held in all but three hospitals. The number of these conferences varies very widely. In three hospitals there are daily conferences, in seven they are held once monthly; the most common interval seems to be once weekly, which takes place in 15 hospitals, and we feel that clinical or pathological conferences should be held at least once weekly in all hospitals. Pathological conferences are held with interns in all the hospitals but seven and these usually as often as once a week. Nineteen of the hospitals hold conferences in various specialties. Interns have special instruction in x-ray in 19 hospitals and in diagnosis and therapy in five. They receive special instruction in the pathological laboratory in eight hospitals, in the bacteriological laboratory in 14, and in the serological laboratory in eight. They receive instruction in physiotherapy in only two of the hospitals, but they do receive instruction in diet and nutrition in 17. All but two of the hospitals have a medical library. This varies in size from 25 to 31,000 volumes. All but four afford research facilities for the staff.

The educational facilities for the medical profession offered by the children's hospitals are distinctly above the average of those offered by other hospitals either special or general. There seems to be a realization that

children's hospitals should be used for teaching not only for the medical students, but to a large extent for postgraduates and also for interns who are receiving their training in these hospitals. While conditions are not all that one could wish for, the relative position of the children's hospitals in the matter of medical education either to the student, intern, or practicing physician must be quite high.

e) Special information

The routine custom of the staff in handling patients is quite varied. It is surprising that there is so much difference of opinion. That observation or isolation wards, which are certainly desirable, should not be found in all the hospitals is of course possibly due to a lack of space, but that throat cultures, vaginal smears, etc., are not routine measures must be a surprise to anyone familiar with the work among children. There is a general agreement that when the child enters the hospital blood counts, urine an-

TABLE II.

	Upper Resp. Infections	Pneumonia	Typhoid Fever	Epidemic C.S. Meningitis	Erysipelas	Impetigo	Scabies
General wards	7	5	1	0	0	1	4
Infectious precautions	5	3	0	1	1	5	8
Cubicles	22	25	5	5	6	6	5
Isolation			19	16	21	17	9
Special wards	0	1	2	3	3	3	3
Not admitted	0	0	7	9	3	2	2
No reply	1	1	1	1	1	1	1

	Pediculosis	Syphilis	Gon. Vag.	Gen. Oph.	Orthopedic	Otolaryngological	Neurological
General wards	7	18	0	0	18	23	29
Infectious precautions	11	..	0	0	..	..	1
Cubicles	6	2	2	2	..	..	..
Isolation	5	11	13	18	16	10	3
Special wards	3	1	5	3	..	..	..
Not admitted	2	1	14	9	..	..	..
No reply	1	2	1	1	1	1	1

Note: In some instances it was impossible to tabulate one or more of the replies.

alysis, and tuberculin tests should be done, and a complete history and physical examination, of course, should be required in all hospitals.

The handling of special cases is best exemplified in Table II, which needs very little comment. There is a wide variation of opinion as to what should be done with these cases and this is shown best in the table included.

II[1].

The general data concerning children's hospitals in the United States and Canada was obtained from the same questionnaires and therefore under the same conditions as the data regarding the staff.

Since many answers to this section of the questionnaire are incomplete, or indefinite, or omitted altogether an accurate summary is hardly possible. However, the general picture is presented as follows:

Thirty-two of the group of 35 hospitals are in the United States and three in Canada. Those in the United States are located in 17 states: California, Colorado, Illinois, Indiana, Maine, Maryland, Massachusetts, Mississippi, Michigan, Missouri, New York, Ohio, Pennsylvania, Washington, Wisconsin, District of Columbia, and Iowa. These hospitals are in our largest cities:

1 Los Angeles	1 Cincinnati	1 Kansas City
1 San Francisco	1 Cleveland	1 St. Louis
1 Denver	1 Indianapolis	1 Staten Island
1 Seattle	1 Iowa City	1 Columbus
1 Washington, D. C.	1 Portland, Maine	1 Pittsburgh
4 Chicago	2 Boston	1 Milwaukee
1 Baltimore	1 Philadelphia	1 Buffalo
4 New York City	1 Detroit	
1 Akron	1 Ann Arbor	

Canada:

1 Winnipeg	1 Toronto	1 Montreal

Twenty-seven of these institutions are located east of the Mississippi River and only five west of the Mississippi.

It is interesting to note at this point that while there are only 32 children's hospitals, there are 6,667 registered hospitals in the United States and of these 4,021 are properly designated general hospitals. Children's hospitals are, therefore, less than one-half of one per cent of the total. The natural inference is that the general or other hospitals throughout the United States have departments for children and must take care of a large

[1]We wish to express our appreciation of the time and advice given us by Mr. Asa Bacon and Mr. Herman Hensel, Superintendent and Assistant Superintendent of the Presbyterian Hospital, Chicago.

percentage of the children entering hospitals. This is correct, for the hospitals and dispensaries report of the White House Conference on Child Health and Protection reports a total of 81,055 beds available for children and about 47,939 bassinets, a combined total of 13% of all hospital beds.

In four children's hospitals west of the Mississippi, there are 721 beds, a relatively small number in comparison to the population of that area. The fifth hospital failed to answer that section of the questionnaire.

The cost of buildings, without land values, of 25 institutions reporting, amounts to $23,779,037, an average of $951,180 per institution. Taken as a whole, the buildings are moderately new and seem to be fairly well located as to their general surroundings (such as sunlight and lack of noise), considering that these hospitals are in large cities and consequently in or near congested areas. Only five are in better class residence districts.

With the exception of three, the group represents private enterprise: one being under county control and two under municipal control.

Superintendents in charge are classified as follows:

10 male physicians	17 female registered nurses
5 male lay persons	1 female lay person

It is seen that registered nurses predominate in number.

As far as can be determined, the work done by these institutions is nearly all charity, the income from patients being negligible. Three-quarters of the general hospitals also accept children as free patients. For their maintenance, the children's hospitals derive their income from the following sources:

a) City, county, or state (21)
b) Endowment fund (30)
c) Private contributions (35)
d) Community chest (?)
e) Income from patients (?)

Figures are not in form to show with any accuracy the amounts the group as a whole derives from each of the above sources. However, income from the endowment funds appears to be the chief source of support, with private contributions being second; city, county, and state, third; community chests, fourth; with very little income from pay patients. (The precariousness of the position of the hospitals in any period of economic stress is at once evident.)

Figures are not available which give costs of maintaining these institutions for any fiscal year. The per capita costs, however, for 1932, average $4.82, which seems a reasonable figure.

The cost per patient per day varies from $1.87 to $9.21. In only two hospitals are the costs under $3 per day. In ten hospitals the costs are between $3 and $4. In 19 hospitals the costs are over $4. In 13 hospitals the costs are over $5; in nine the costs are over $6. In two hospitals the costs are over $7; in one of these the cost per day is $8.06 and in the other $9.21 per day.

The 33 hospitals reporting total admissions show 98,373 patients cared for in 1932, or an average of 2,981. Again comparing the general hospitals with our group, we note that the total admissions for 6,562 hospitals is estimated at 7,228,151; so that our group admitted only 1.36% of the total hospital admissions including children and adults.

Total admissions in the respective children's hospitals for 1932 varied from 979 to 7,914. Eight hospitals had total admissions under 2,000;

TABLE III

GENERAL STATISTICS

	Supt.	*Per Capita*	*Age*	*Total Admissions 1932*	*Total Beds*	*Bassinets*	*Cribs*	*Beds*
1.	F—R. N.	$5.07	12	3,147	190	0	42	148
2.	M—Phys.	6.58	14	4 897	154	44	30	80
3.	M—Lay	6.719	21	2,982	265	18	28	119
4.	F—R. N.	3.92	14	6,016	182	14	50	118
5.	M—Phys.	6.21	15	....	63	16	16	34
6.	F—R. N.	4.78	13	4,116	264	..	..	...
7.	M—Phys.	5.24	15	2,744	146	18	86	22
8.	M—Lay.	2.57	14	7,083	357	..	..	...
9.	M—Phys.	3.88	16	3,582	342	10	80	232
10.	.....	...	..	....	...	..	..	...
11.	F—R. N.	3.04	12	474	100	..	40	60
12.	M—Phys.	6.35	14	1,077	82	6	40	36
13.	F—R. N.	6.22	12	1,371	50	3	11	36
14.	F—R. N.	5.21	12	6,687	332	50	40	242
15.	F—R. N.	3.12	12	6,074	240	10	90	140
16.	M—Phys.	3.85	13	7,914	194	12	14	168
17.	F—R. N.	1.87	16	2,500	168	12	96	60
18.	F—R. N.	6.08	14	3,096	...	..	..	...
19.	F—R. N.	3.59	14	4,522	218	45	18	150
20.	M—Phys.	9.21	13	2,009	200	80	50	...
21.	F—R. N.	3.25	7	2,778	340	60	260	20
22.	F—R. N.	8.06	12	824	50	10	40	...
23.	F—Lay	4.68	12	2,068	109	..	17	92
24.	M—Lay	5.12	12	828	190	..	30	160
25.	M—Lay	5.392	15	1,998	110	0	27	83
26.	M—Lay	6.01	15	2,415	226	5	40	181
27.	M—Phys.	6.336	14	979	110	..	..	...
28.	F—R. N.	3.68	14	2,584	100	12	46	42
29.	F—R. N.	4.69	12	2,496	136	..	55	81
30.	F—R. N.	4.15	15	2,680	196	..	42	154
31.	F—R. N.	3.69	14	1,288	132	7	18	107
32.	F—R. N.	3.48	12	3,710	155	..	55	100
33.	M—Phys.	3.23	14	3,249	236	6	40	190
34.	.....	...	?	?	...	..	..	...
35.	M—Phys.	3.93	14	2,885	135	16	65	54

three had admissions under 1,000; 13 hospitals had 3,000 or more admissions; eight had 4,000 or more admissions; five had 5,000 or more; four had 6,000 or more; and two had 7,000 admissions.

These children's hospitals admit patients from birth to 16 years of age, the average being up to 14 years. Twenty-one admit children over 12 years of age. In one instance, the age limit for the orthopedic department is placed at 21. All admit both colored and white children.

The total bed capacity of this group is approximately 5,772, ranging from 50 to 350 beds in each institution. Twenty-nine have bed capacities of 100 or more. Twenty-one have 150 or more beds; 13 have 200 or more beds; only four have over 250 beds; and three have over 300 beds. The general hospitals have something over one million beds.

This number—5,772—is divided into bassinets for newborn, cribs for under two years, and beds. Roughly, there are 542 bassinets, 1,506 cribs, and 3,724 beds. Ten hospitals have no bassinets for medical cases.

As nearly as can be estimated, private rooms are 445 out of the total, less than 8%. Wards predominate, and possibly as high as 60% of the wards are divided into cubicles. These figures naturally lack accuracy owing to there being more than one bed in private rooms, beds not in use, and conversion from one type of ward into another type of ward. These hospitals are variable in the use of their ward beds; as the need arises they are converted into contagious wards, observation wards, etc.

The following departments prevail: medical, surgical, orthopedic, neurological, otolaryngological, and contagious.

Out of 20 hospitals, nine report special wards for medical cases; 20 out of 33 special wards for surgical cases; 14 out of 32 for orthopedic cases; two out of 32 for neurological cases; 13 out of 32 for otolaryngological cases; 18 out of 31 a contagious department; 19 out of 32 an observation ward. Special departments may often be created as the need arises. While many hospitals have contagious departments they are largely used for contagion developing within the hospital.

Only two of the entire group accept all types of cases; all the others exclude certain diseases, such as contagion in general, smallpox, mental, active venereal, pulmonary tuberculosis, etc.

Hospital Ethics, Publicity, and Public Relations

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IS IT ETHICAL to publicize hospitals? We can answer that question with an emphatic "yes," provided that we bear in mind certain qualifications. First of all, we must remember that hospitals are no ordinary business ventures. They have no merchandise to sell; therefore, they need not enter into competitive methods. Hospitals are associated with the business of saving human lives. They are servants of the public, humanitarian institutions, operating on a non-profit-making basis. Hospital publicity must, therefore, be entirely different from commercial publicity. The latter advertises one specific business concern. Hospital publicity spreads knowledge about *all* hospitals.

In fact, the word publicity should not be used in connection with hospitals. Because it savors of commercialism, of subtle, sometimes even underhand methods of getting information across to the public, the term publicity is not appropriate, nor is it strictly applicable to hospitals. Public relations is a much more suitable term because it implies education of the public. It is a word used to show that hospitals are not interested in publicizing their individual institutions, but rather wish to educate the public concerning the services offered by all hospitals.

For three years now the American Hospital Association has sponsored a Public Relations Committee, the purpose of which is to educate the public concerning hospitals and hospital services. Because the work of this committee actually deals with public education, the name of the committee is at the present time being changed from "Public Relations" to "Public Education."

A definite Code of Ethics has been adopted by the American Hospital Association which explains very clearly what is meant by ethical hospital publicity.

> Publicity by clinics, hospitals, sanatoria, and other semi-public medical institutions as to quality of work done implies unusual and exceptional ability and efficiency on the part of their professional staffs, and therefore is advertising of the medical men concerned. This type of advertising distinctly savors of quackery, and is unethical.
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> Publicity by any such institution stating or implying that by reason of its exceptionally fine equipment and material resources it is able to, or does, give the public better medical service than similar institutions are able or willing to render, is advertising for

Read before the Institute for Hospital Administrators, Chicago, September 25, 1933.

purposes of self-aggrandizement. Statements of this type are frequently exaggerated and misleading and are detrimental to the best interests of the public, of the institutions concerned, and of true medical progress.

From time to time, hospitals, sanatoria, and other similar medical institutions must raise funds from an interested public for capital expenditure and maintenance. Furnishing the public with facts concerning such an institution, its work, its aims, and its ideals, is legitimate and desirable. The public is interested in these facts and therefore is entitled to know them. Publicity dealing with these facts is ethical, provided, of course, that it refrains from any comparisons or superlative terms either direct or implied.

Publicity carried on by any one institution should be such as will be beneficial to all like institutions in the community. It should tend to develop public confidence in hospitals, sanatoria, and other medical institutions. It should be free from superlative or comparative statements and any implication of rate-cutting or unfair competition.

The Public Relations Committee through its many articles has shown how hospitals may be publicized ethically, how the public may be educated by receiving accurate, factual information concerning all hospitals. Such articles as "Support Your Hospitals," "Hospital Facts," "Hospital Costs and Care," "Be Modern and Live Longer," "What Civilization Owes to Medical Science," "Cancer Is Curable," and many others have been disseminated by the Public Relations Committee. You may receive copies of these free of charge by writing the American Hospital Association.

The information contained in these articles is accurate and most effective in combating the recent spread of material in various magazines which has been misleading to the public. It is not that the authors of these articles have deliberately attempted to project a warped and utterly false picture of the hospital before the public. In most instances, I believe the writers have been uninformed or incompetent.

Fortunately, however, there have been published some excellent magazine articles concerning hospitals. One called "Community Assets Essential to Recovery" appeared in the *Bankers' Monthly;* "In Defense of Good Health" was published by the *New Outlook* magazine; recently there appeared in the *Christian Herald* a hospital story entitled "God Rides the Ambulance" in which the humanitarian work of the hospital is clearly, interestingly, and most effectively presented. The American Hospital Association has reprints of all of these articles which may be had upon request.

Public relations covers a wide field. It is vitally necessary, especially these days, that the public be properly informed concerning the hospital,

so that the work of our institutions may be understood—more than that—so that they may be appreciated, and in order that we may extend the services of the hospital by enlisting the coöperation of an enlightened public.

The last two reports of the Public Relations Committee of the American Hospital Association, those for 1932 and 1933, have outlined in a detailed and comprehensive fashion an effective program of public education[1].

Three means of legitimately educating the public concerning hospitals and hospital work are cited: (1) the written word; (2) the spoken word; (3) visual means.

Some mention has already been made of the written word. The committee has available several articles which are appropriate for newspaper copy in local communities. We have clippings from all parts of the country which are undeniable evidence of the fact that editors appreciate the news value of hospital stories. Right here I should like to say that it is greatly to the advantage of every hospital to develop friendly relations with its own local newspapers.

Articles published in newspapers may take the form of straight news stories, feature material, or editorials. They are particularly effective when accompanied by attractive pictures which show various hospital activities. Mention has already been made of articles appearing in various magazines. The committee feels that the general magazine field is an effective source through which to reach and educate the public concerning hospitals.

Stories in high school papers are of importance, inasmuch as they not only are read by the entire student body, but also reach the parents, relatives, and friends of the pupils.

Bulletins published and distributed by the hospital which give information concerning the hospital and explain the aims, ideals, and services of the institution can do much toward educating the public. Important, also, is the annual report which can be made much more interesting than a mere statistical analysis. There is opportunity here to present the institution in all its action and diligent activity by describing the work of each department, and enlivening the report with pictorial material showing various hospital activities.

House organs, that is, publications of a hospital for distribution among its own personnel, have a definite place in a public relations program. Every person employed by a hospital is an important factor in spreading information about the institution. A pamphlet with an open column encouraging constructive suggestions and criticisms is most valuable.

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[1]The Public Relations Committee Report for 1933 not only reviews what has been accomplished in public relations, but also enumerates and explains the various activities involved in a complete program of public education which the committee has set up and plans to carry through this coming year. The report may be secured by writing the headquarters of the American Hospital Association

The committee has prepared a "Patient's Book" which contains in informal language information applicable to all hospitals. These booklets are available at a very slight cost. The name of the individual hospital is printed on the front cover, and the book is intended for distribution among patients of an institution so that they may have a clearer understanding of what the hospital is trying to do for them.

Then, there are outside bulletins and publications. Stories concerning hospitals have a place in state medical publications, church bulletins, community guide books, railroad pamphlets, chamber of commerce literature. Hospitals must not let one opportunity escape through which information can be disseminated which will educate the public concerning them.

Hospitals are more and more developing the personal touch with their patients by sending letters to relatives or friends—impersonal, friendly notes, informing the person that the patient is receiving the best possible care, and including information about the hospital. The follow-up letter sent by the hospital to the patient within a week after he has left the institution is a friendly gesture on the part of the hospital. Never standardized or mimeographed, this letter to be most effective should reveal a personal interest in the patient, invite his friendship, and wish him many years of health and happiness.

So much for the written word. So far as the spoken word is concerned, there is an almost unlimited field of opportunity here through which to reach and educate the public.

A satisfied patient can be likened to "casting bread upon the waters." Certainly, there is no more effective means of educating the public concerning hospitals. If we are to have satisfied patients, we must give excellent service. In other words, let the product speak for itself. The medical staff, nurses, interns, dietitians—all personnel employed in the hospital through their contacts with patients and visitors can spread the good gospel about the hospital. In a program of public relations, the first step is the development of a loyal and sincere attitude within the institution. To eliminate the possibility of any internal institutional unpleasantness which might destroy every direct attempt at educating the public, the administration must have one hundred per cent harmony and coöperation.

The channels through which information concerning the hospital may reach the public by word of mouth are numerous in every community. Such organizations as the Chamber of Commerce, Rotary, Kiwanis, and Lions' clubs, American Legion, women's clubs and auxiliaries, business and service clubs, offer opportunities for the dissemination of hospital facts. Talks about the hospital, its place in the community, the work it is doing, its definite relation to national recovery—all these may be ex-

plained in addresses made before the aforementioned groups. Church sermons might well include hospital information. In fact, some excellent talks on hospital subjects have been made by ministers before their congregations and also by guest speakers, particularly on the Sunday preceding National Hospital Day.

Schools and extra-curricular groups are an excellent field for the spread of hospital knowledge. Children are interested in scientific discoveries, and if the information given them is presented in the right fashion, they can absorb a good deal of knowledge concerning the prevention of disease and the promotion of health. It is not necessary to tell the children about elementary health matters. They know more about those facts, perhaps, than we do ourselves. To talk to them about keeping windows open and brushing their teeth is just time wasted, both yours and theirs. They like stories about great men in medical science, about the battle being waged at the present time to kill disease, of the successful wars which medical science has waged in the past. Put your health information in terms of a fight, and you will enlist their interest and their sympathies to help conquer the various enemy diseases. Explain to them that the battle-front and strong fortresses are situated in the hospital. Then you will see how eager they will all be to visit the hospital. And this is an opportune time to arrange for group tours to be made through the hospital. It is wise, also, to suggest that compositions and term papers be written on the hospital and health subjects. Make as many tie-ups as you can. You will find that the teachers are always willing to coöperate. Upon these children, who are our future citizens, rests the responsibility for the future curbing of disease and the promotion of health. They, also, carry much information to their parents, relatives, and friends.

Radio talks on hospital subjects have become more popular. Because it is one of the most important factors in forming public opinion, the radio should be more widely used by individual hospitals. Regular broadcasts could very successfully be undertaken by several hospitals in one community.

It might be well to mention here a few illustrations of successfully carried out public relations programs. The Protestant Deaconess Hospital in Evansville, Indiana has made remarkable progress in its community in popularizing information about hospitals. Through a well developed program of public relations which includes regularly scheduled talks before various community organizations, schools, and clubs, in churches, and over the radio, a world of good hospital information has been effectively disseminated. Albert G. Hahn, business director of the Protestant Deaconess Hospital, is deserving of much praise for his fine work in educating the public through a well directed plan of public relations.

The Brokaw Hospital in Normal, Illinois sponsors a series of meetings in its own lecture room which are open to the public. These meetings are excellent illustrations of the health education forum in which discussions concerning the hospital are of tremendous educational value.

The American College of Surgeons through its annual clinical congresses and sectional meetings has demonstrated how a plan of public education can successfully be undertaken and carried out. No possible source through which the public might be reached is overlooked. At the last Congress held in Chicago, talks were made over the radio, before school groups, the Chamber of Commerce, Rotary, and other community clubs, and women's auxiliaries. Ten thousand persons attended the community health meeting at the Chicago Stadium. The talks made by the outstanding physicians and surgeons were brief, concise, and couched in every-day, non-scientific language. Community health meetings are extremely effective in educating the public. It would certainly be well to stimulate them in your own communities.

News releases were sent by the College to the various newspapers a week to ten days in advance of the meeting. Reporters were present at many of the sessions. The Congress was front page copy to the newspapers. In a well planned program of public relations, there is always an effective combination and coördination of the written and the spoken word. Not only are addresses made before large audiences, but the talks are transcribed into newspaper copy to be read by those who did not have the opportunity to hear the addresses.

If there is any one person upon whom a definite responsibility is placed in a public relations campaign, that person is the hospital superintendent. It is vitally necessary that he develop facility in handling newspaper reporters with tact and courtesy, that he be willing to coöperate, and, moreover, develop a news sense, that is, have the ability to recognize news.

Just as important, if not more so, is an easy, smooth flow of language. The superintendent is called upon to make many addresses during the year. He is the key person in spreading hospital information by word of mouth. Much of the success of a public relations program depends upon his ability to speak pleasantly and to the point, to make himself understood, and compel attention. Anyone who has heard Robert Jolly address an audience or make a radio talk cannot but be impressed with the effectiveness of his speech. A rapid, pleasing speaker, he can get across his message in shorter time, perhaps, than any other speaker you have ever heard. Moreover, Mr. Jolly holds the unwavering attention of his audience and entertains as well as informs at the same time.

Newspaper editors and radio executives are willing to coöperate. They have shown themselves to be splendid allies. With such valuable means

of outlet, we would be falling down on our jobs did we not take full advantage of these generous opportunities.

In all kinds of education today visual methods are being used to an ever-increasing extent. They are a vital aid in informing the public concerning hospitals. Not only does the visual method arouse interest—it also leaves lasting impressions. The more that people can be shown, the better will they understand and remember what they have seen.

Every day the hospital can show persons of local influence through the institution. Seeing the hospital in actual operation has made many a friend for the hospital who had previously been disinterested outsiders or even knockers.

In a like manner can group tours through the hospital be conducted. The women's auxiliary, community service clubs, school children, high school groups, various organizations, can be shown the hospital in actual operation. By keeping the groups small, each unit not exceeding ten in number, and supplying the group with a competent guide, the hospital can give the public a sympathetic and comprehensive understanding of its institution.

National Hospital Day on May 12 supplies an excellent opportunity for the dissemination of hospital information. On this day the public at large is invited to see through the hospital. Interesting demonstrations should have a feature rôle on the all-day program. There is no more opportune time to make friends for the hospital.

Exhibits present an opportunity whereby information can be conveyed to the public. Particularly effective were the hospital exhibits at A Century of Progress. In the Hall of Science in which most of the hospital exhibits were located, thousands of people were able to glean important information concerning these public service institutions.

Permanent exhibits could well be maintained by hospitals. Every department could contribute unit exhibitions so that visitors touring the institution would understand more clearly the work of the various departments, as, for instance, x-ray, laboratory, clinical record department, etc.

Lantern slides are proving to be a valuable adjunct to hospitals in educating the public. Through showing a series of well selected hospital scenes, an observer can be entertained and at the same time greatly enlightened.

Hospital motion pictures are becoming more popular. The latest one, developed by the American College of Surgeons, is a "talkie" entitled "Good Hospital Care." It has been shown in various cities throughout Illinois, Washington, Montana, Connecticut, Masschusetts, New Jersey, New York, Arkansas, Texas, British Columbia, and Ontario. There is action in this picture. Not only are the opening scenes interest-demanding

and attention-sustaining, but they are thrilling, and full of suspense. Throughout the entire picture, the story reveals the hospital in action. The public likes this picture. It is enjoyed as entertainment, and at the same time is highly instructive. If it is necessary to sugar-coat the pills of knowledge which we are feeding the public, then well and good. So long as the information is there, it is certainly satisfactory to put the public in a receptive mood through the medium of entertainment.

This is a busy world. People are constantly "on the go." Their attentions are being diverted by all sorts of distractions. Lectures, "movies," dances, financial worries, international politics, as well as home disturbances, all vie for attention. But we can't afford to let the hospital be neglected.

It is one of life's necessities. That's the point we must get over to the public. Hospitals are necessary for the perpetuation of life. They have played a major rôle in the history of civilization. They have been an important factor in maintaining the health of our citizens during the long, hard depression. They are constantly fighting disease and promoting health.

Our hospitals have a vital message to get over to the public. In fact, if they are to serve the public most successfully, they must be clearly understood and thoroughly appreciated. Each one of us can do his share in ethically publicizing his institution, and at the same time disseminate worthwhile information about all hospitals. It's a big job, but with everyone's active coöperation it can be done.

A RESOLUTION was passed on January 3 by its Committee on Medical Economics urging the Colorado State Medical Society to "disapprove the construction of any hospitals or related institutions until it is evident that existing facilities are inadequate."

Tuberculosis as It Affects the General Hospital[1]

HENRY D. CHADWICK, M.D.
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IT IS 50 YEARS since Koch announced the discovery of the tubercle bacillus and proved beyond question that tuberculosis was an infectious disease. This revolutionary announcement was gradually accepted by most of the medical profession. Physicians holding responsible positions very reluctantly acknowledged the communicability of the disease and caused rules to be made excluding tuberculosis from the hospitals. The almshouses were then the only places of refuge left for the consumptives who could not be cared for at home, and even there they were unwelcome inmates.

Three years after Koch's discovery, Trudeau in the Adirondacks demonstrated that tuberculosis was curable. Mountain air, outdoor life, rest, and food were the remedies used. Thus began the sanatorium movement in America which has grown rapidly, and now there are more than 600 institutions of this kind in the country with a capacity of 75,000 beds.

The early sanatoria were of cheap construction of the lean-to and open ward type to permit the patients to live in the open air as much of the 24 hours as possible. They were preferably located in the mountains and therefore isolated from centers of population. It was thought necessary to do this in order to permit the patient to live in an atmosphere free from dust and smoke and get the maximum amount of fresh air.

The first state sanatorium in the United States was built in Rutland, Massachusetts, in 1898. No method of heating the wards was installed, since cold air was thought desirable for the patients. The patients without fever were expected to go to meals and do much of the work in the wards. The treatment stressed fresh air in the open, summer and winter, forced feeding, and graded exercise. Rest was not emphasized. Other sanatoria of the lean-to or shack construction followed. From such primitive institutions there has gradually evolved the newer type of sanatorium which is a counterpart in many ways of the modern hospital. The early sanatoria cost a few hundred dollars a bed. Many built in recent years have cost $10,000 a bed. They indeed rival in beauty of architecture and in the completeness of their appointments the best of the modern hospitals.

The tuberculosis patient who was wantonly abandoned by the hospitals 50 years ago and was suffered to live only in the almshouses has now come into his estate. He is requesting no favors. On the contrary, he is in a position to give aid to the general hospital in the present emergency.

[1]Read before the New England Hospital Association, Boston, February 16, 1934.

Some of the general hospitals are now making overtures and gratefully accepting cases of tuberculosis at reduced rates. The many vacant beds may have furnished the motive, but whatever the reason the effect will be beneficial both to the hospital and to the cause of public health.

What has brought about this change in viewpoint? The answer is that treatment of tuberculosis has been revolutionized and phthisiophobia has subsided.

The modern method of treatment of tuberculosis requires strict bed rest and good nursing for weeks and months and sometimes for years. It is the same kind of care given the acutely ill in the hospitals but continued over a longer period of time. Mountain air is no longer considered essential. Climatic conditions of a special nature are not required. The cure of tuberculosis takes place in every state and at all elevations and under all climatic conditions.

The cornerstone of treatment is rest. Rest for the body is obtained by lying in bed. This is supplemented by rest of the diseased part obtained by splinting the tuberculous lung with an air cushion, as is done with artificial pneumothorax, or further restricting the expansion of the lung by reducing the thoracic space, as is accomplished when the phrenic nerve is removed to stop movement of the diaphragm (phrenicectomy), or by resection of the ribs (thoracoplasty) in certain cases to obliterate the hemothorax and make permanent the collapse of the lung. All these newer active therapeutic measures can best be done in an institution of the modern hospital type where thoracic surgeons, skilled nursing, and operating rooms are available.

The services of different members of a consulting staff are frequently needed. A tuberculous patient has a chronic disease often lasting years, and during this time is subject to all the other ills that afflict mankind. Treatment for these associated diseases is of prime importance as an adjunct to the care of the tuberculosis.

The general hospital can fill an important place in the tuberculosis field in many localities where there are not enough sanatorium beds or where these institutions are without operating room facilities. There are many such areas in the country. It has been impossible in most states to build enough institutions to provide sufficient beds to care for all the cases of tuberculosis which require treatment. On the other hand, the hospitals at this time have many vacant beds and could set aside a section for the care of tuberculous patients now on the waiting list and clamoring for admission. No one knows how long the present condition will continue in the general hospitals, but during this period, whatever its duration, the vacant beds could be filled with tuberculous cases to the advantage of both the institution and the patient. When business resumes its normal trend and

patients again fill the hospitals, the tuberculous cases could be discharged or additional wards built for their care. The demand for beds in institutions caring for tuberculosis is greatly increased during periods of business depression. Furthermore, it is widely recognized that modern treatment of tuberculosis cannot be so effectually carried out at home as in a sanatorium. Most physicians when they make a diagnosis of tuberculosis immediately advise sanatorium care, and the people at large have been educated to expect such treatment for those afflicted with that disease. The state laws and city ordinances provide for the care of communicable disease, and tuberculosis is rightfully included in this group.

One bed per tuberculosis death was the ratio formerly considered desirable, but this has been shown to be inadequate in the populous centers. Detroit always had a waiting list pathetically long until the facilities had been gradually increased and reached the ratio of two beds per death. Since then applicants for sanatorium care have been admitted without delay. The city owns two institutions for the care of tuberculous patients, and both are under the control of the department of health. One of them, the tuberculosis unit of the Herman Kiefer Hospital, was opened in 1929 and accommodates 670 patients. The other is a sanatorium situated 25 miles out of the city at Northville with a capacity of 830 beds.

The patients are admitted to the hospital and given as strict bed treatment as would be observed in any hospital for acute diseases. After the examination and laboratory study have been completed, each case is brought up in a conference attended by the whole medical staff. Diagnosis and classification of the type of disease is made and the form of treatment decided upon. Collapse therapy of some kind, such as pneumothorax or phrenic nerve surgery, is used to supplement the bed rest that all patients receive. These measures are instituted at once in the great majority of cases. The exceptions are the few patients that have a very minimal lesion where activity of the disease may be questionable and the far advanced cases where the disease has become so generalized that operative measures of any kind would be a useless procedure. Later, if the collapse therapy measures mentioned are ineffectual, thoracoplasty may be decided upon.

After a period of observation and treatment in the hospital the more favorable cases are transferred to the sanatorium. In these two institutions with 1,500 beds, 82% of the adult patients are now receiving collapse therapy of some kind.

I have described in more or less detail the treatment of tuberculosis as it is being carried out in Detroit. The results of these active measures have lowered the death rate from 92 to 66, and the number of cases dis-

charged from the sanatorium has increased from 6% to 44% in five years' time.

General hospitals have the facilities to carry out such treatment as I have outlined, but most of them lack a medical and surgical personnel trained in the modern treatment of pulmonary tuberculosis. With the development of sanatorium treatment and the introduction of collapse therapy, more and more cases of tuberculosis have been turned over to the specialist. Most of these physicians receive the compensation which enables them to live from the city or state through the institution with which they are connected and not from the patients. Tuberculosis is a disease of long duration. It has acute exacerbations but runs such a chronic course that savings are soon exhausted and the earning power of the patients lessens or ceases altogether. As they are cases of communicable disease, their treatment and maintenance must be borne by the taxpayer to a great extent at all times and the burden is increased in periods of unemployment and reduced incomes. The situation in Detroit is probably similar to that in other municipalities in this regard. Of the 8,034 cases of tuberculosis on the register, 2,066 are hospitalized, 5,968 are under the supervision of the clinic physicians in their homes, and but 252, or 3%, are under the care of a private physician. Of the cases under sanatorium and hospital treatment, less than 10% are found by the investigators of the county auditor's office to be able to pay even a small part of their maintenance cost. The victims of tuberculosis will continue to be a major public health problem until the disease ceases to occupy a place among the leading causes of death.

The general hospital can be of great help in this problem. Laird and Mayne[1] report that the Nopeming County Sanatorium has an affiliation with St. Luke's and St. Mary's hospitals of Duluth, and over 1,000 cases of pulmonary tuberculosis have been admitted to the tuberculosis departments of these hospitals during the past six years. A large proportion of the patients at the sanatorium have first been studied at one of these hospitals. A member of the sanatorium staff visits the patients in these hospitals daily. The hospitals' resources for treatment are freely drawn upon, and the members of the staff are available for consultation and general and thoracic surgery. The association of the physicians of sanatorium and hospital is of mutual advantage in carrying out treatment and provides excellent training for the resident physicians and nurses.

In Detroit another plan is carried out. There the city maintains a large receiving hospital and sanatorium for tuberculosis cases, but it was necessary to subsidize several private sanatoria, since not enough beds were available and the waiting list continued to grow. Many times cases favorable for treatment when first diagnosed became hopeless by the time their

turn came for admission. To their aid came an offer from the general hospitals. Three of the largest in the city and several of the smaller ones, which had many vacant beds, agreed to accept cases of tuberculosis. The amount paid by the county, although smaller than the established hospital rates, served to reduce the overhead and therefore was financially advantageous. Their coöperation was gratefully accepted, and enough vacant beds became available to hospitalize all patients as soon as applications were made.

The same standard of treatment was maintained as in the tuberculosis institutions. This was effected by the chief of the tuberculosis service of the health department attending conferences with the staff physicians in charge of the tuberculous cases in the affiliated hospitals. It was necessary for some of the hospitals to add to their staff a physician skilled in pneumothorax to administer that form of treatment. The cases requiring phrenic nerve surgery or thoracoplasty are transferred to the Herman Kiefer Hospital if the hospital in which the patients are being treated is not equipped for such operations.

There are obvious advantages in this arrangement. Additional beds are made available so that patients can be given care and treatment promptly. The public is protected from infection by the segregation of patients who otherwise would spread the disease.

Objection may be raised to taking patients with an infectious disease into a general hospital. Will the doctors, nurses, attendants, and other patients contract tuberculosis as a result of such exposure? H. W. Hill[2] of Vancouver points out that "at least one-third of the general run of hospital patients develop some form of infectiveness in some degree, sooner or later. Therefore the ordinary patient, regardless of the purpose for which he is ostensibly admitted, should be considered at least potentially infectious until he is proved not to be, rather than the converse. (Thus, he may have or develop pneumonia, typhoid fever, tuberculosis, measles, scarlet fever, etc.) Therefore, every medical student and especially every student nurse should be taught from the first to be constantly on guard against such possible—rather, very probable—infectiveness, throughout the whole period of the patient's stay in the hospital. Especially should every patient admitted be examined for tuberculosis, as well as for any other infection, acute or chronic."

Patients are constantly being admitted to hospitals who have tuberculosis as an associated condition. Most of these patients are unaware of their tuberculosis, and this disease is often unrecognized by their physicians, who are intent on treating the more obvious condition, be it disease or injury. Tuberculosis is often masked by other concurrent diseases or simulates other conditions and remains undetected. During this time all

who share in the care of the patient are unsuspecting, and therefore precautions against infection are not imposed upon the patient or observed by others. That this danger is real and that infection does occur is shown by the frequency with which nurses, medical students, and interns contract tuberculosis in the general hospitals.

Stewart[3] summarizes the investigations made at different Canadian hospitals as to the tuberculous infection among nurses. From his paper I quote the following:

> "Ross[4] reported in 1929 that 60 nurses or pupils from 20 hospitals had been treated at the Manitoba Sanatorium during five years, with as many as 17 under treatment at one time. A large proportion had broken down during training or within a year thereafter, and acute or childhood types of disease were dominant. The conclusion could not be escaped that something in the hospital environment had been responsible. None of the hospitals from which these nurses came had sections for the treatment of tuberculosis. The chief sources of infection presumably were ordinary hospital patients with uncomplained of, unnoticed, unsuspected, undiagnosed, and 'untagged' background tuberculosis. He estimates that 6% of nurses entering upon training courses in general hospitals may expect to develop tuberculosis during training or soon after.
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> "Out of a total of 670 student nurses in training in the Vancouver General Hospital at the beginning of 1925, or admitted to the school up to the end of 1927, a report of 1930 showed that 15 had been treated for pulmonary tuberculosis, two had tuberculous meningitis, three pleurisy with effusion, and six had lesions showing by x-ray but without symptoms—26 in all, or nearly 4% of the student body.
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> "Myers[5] tells of a general hospital class of 30 in which four developed tuberculosis during training or soon afterwards—a 13% incidence.
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> "Miss Whitney[6] points out that of all the nurses aided by the Relief Fund of the American Nurses' Association the disability is tuberculosis in 54%, and of those between ages 21 and 30, 75%. She shows the incidence of tuberculosis to be one-third higher in nurses in training in hospitals than among women of the same ages in the general population.
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> "We will now give the experience in institutions where all the patients are tuberculous. In a follow up study of 737 present and former workers in a hospital for diseases of the chest, Gordon and Cashman[7] found the incidence of tuberculosis showing after the termination of employment to be about 2%. Toan[8] reports tuberculosis as developing in only four of 857 employees other than ex-patients at the Michigan State Sanatorium and quotes a statement that 'No case of pulmonary tuberculosis has been known to develop among the many hundreds of healthy employees at the Trudeau Sanatorium during 45 years.' Laird reports that of 1,800 Nopeming County Sanatorium employees in 20 years, excluding 300 who were ex-patients, 18, or 1%, have since developed symptoms or signs of tuberculosis,

12 with bacilli. Six of the 18 had a definite family history of tuberculosis."

Douglas[9] reports that at the William H. Maybury Sanatorium, Detroit, during the past 10 years 17 employees have developed tuberculosis. Three of these had been diagnosed previously. Five had pleural effusion, ten minimal and two moderately advanced pulmonary tuberculosis. All have recovered except one now under treatment. The 14, excluding the three ex-patients, were supposedly healthy at the time of employment. This makes an incidence of tuberculosis of 1.4 cases, or .53%, among an annual average number of employees of 261. This is less than the estimated morbidity for tuberculosis in the general adult population. Drolet[10] estimates the tuberculosis morbidity in New York to be about .75% for male adults and about .5% for female adults.

For specific groups the following studies show a higher incidence of tuberculosis:

Martin, Pessar, and Goldberg[11] in a recent study of 2,000 food handlers in New York City showed 2.3% with active pulmonary tuberculosis on roentgen examination.

The Michigan Tuberculosis Association in a routine roentgen examination of 250 rural school teachers found 2% of them to have active pulmonary tuberculosis.

Root[12] in a recent article reported tuberculosis as an associated condition in 6.6% of 1,503 diabetic deaths.

In a study made by the Massachusetts Commission on Industrial Diseases in 1933 it was found that 3.5% of 1,609 foundrymen and 9.1% of 961 granite workers had pulmonary tuberculosis.

These studies detailed above show a considerable amount of undiagnosed pulmonary tuberculosis in the community.

By means of the tuberculin test the incidence of tuberculous infection among nurses has been studied in several hospitals. They all show a marked increase in the positive reactors with each year of service.

A study was made recently of the incidence of tuberculous infection among nurses in training in the Detroit hospitals. In 1930, 254 nurses in the entering classes of seven general hospitals were given a tuberculin test and a roentgenogram of the chest, and 37.7% reacted positively. Three students, or 1.1%, on admission were found to have pulmonary tuberculosis as revealed by roentgenogram. This is a very significant finding, since these students had all been subjected to the usual physical examinations and had been accepted as free from disease. In 1931, at the end of the first year of training, the test was repeated and 57% reacted, showing a 20% increase in infection. One of the students was found to have

developed pulmonary tuberculosis. This case would not have been discovered at this time without a roentgenogram. When the students have finished their course, the complete study will be reported by Dr. Altshuler.

From the available information it is clear that tuberculosis occurs among nurses with too great frequency and that regardless of the efforts made to keep tuberculous patients out of general hospitals, many are admitted and spread infection. It is also true that healthy employees of sanatoria rarely develop tuberculosis during their period of service. That is the opinion expressed by many sanatorium physicians.

We must differentiate between tuberculous infection as revealed by the tuberculin test and manifest pulmonary disease as shown by roentgenogram. As to whether tuberculosis develops in an infected individual, this depends on three major factors—the resistance of the individual to tuberculosis, the number of bacilli and frequency with which they are taken into the body, and the virulence of the bacillus. We can do something to influence the first two factors. Nurses in training have so many hours for work and study that they have few left for rest and recreation. Because of this strenuous routine, their natural resistance to infection may become impaired and their susceptibility relatively increased. Precautions can be taken by the nurses and physicians and observed by the patient that will do much to lessen the danger of serious infection if the cases of tuberculosis are recognized as such.

The ventilation of sanatoria obtained by open windows and porches is more nearly adequate and more effective in diluting the number of tubercle bacilli that may be floating about in dust particles than it is in hospitals with their more complicated system of indirect ventilation. The air of sanatorium wards is noticeably fresher than that found as a rule in a general hospital. The sanatorium patients are taught to cover their mouths when coughing, and therefore fewer bacilli are scattered about. Sunlight, the most valuable of all disinfectants, is allowed access to the sanatorium wards to a greater degree than in a hospital. Because of these favorable conditions under which employees of sanatoria carry on their work, the amount of infection is minimized and the resistance to tuberculosis inherent in the individual is maintained or improved. In a sanatorium both the patients and the attendants know that they are dealing with a communicable disease. The patient is taught to keep the mouth covered when coughing, and receptacles are convenient for the disposal of sputum. In the general hospital tuberculosis cases are often undiagnosed, therefore not considered infectious, and no precautions are taken. That is the essential difference between the two types of institution and is a valid reason why it is more hazardous as far as contracting tuberculosis is concerned to work in a general hospital ward than in a sanatorium.

The remedy does not lie in excluding cases of tuberculosis from the hospital, but the cases of tuberculosis that are cared for must be brought into the open so that precautions may be taken to prevent the spread of infection. This may be done by finding out as soon as possible after a patient is admitted whether he has tuberculosis, either as a principal disease or as an associated condition. This should be done whether the case is placed in the medical or surgical service or whether assigned to a ward or private room. Tuberculosis is no respecter of persons.

It is a conservative statement to say that physicians who depend on physical examination alone will be wrong in 20% of the cases. Some that have no disease will be called tuberculous, and many more that have tuberculosis will be passed as free from that disease. The only way to detect all tuberculosis cases is with the roentgenogram and examination of the sputum. Physical examination of the chest is of secondary importance, as by it most early cases of tuberculosis will be missed and many of those that are more advanced.

The expense for films when not paid by the patient should be borne by the hospital. The hospital maintains an x-ray department with a fixed overhead. A single film, costing 60 cents, is usually sufficient for diagnosis and should be taken of every patient on admission. If only to guard against spreading tuberculosis this extra expense is justified. Cultures of nose and throat are taken routinely to guard against diphtheria carriers. Examination of sputum from all patients from whom it can be obtained should also be done to guard against the person who is the carrier of tubercle bacilli and unwittingly sprays them over the unsuspecting attendants. With the roentgenogram and the laboratory test of the sputum all infectious cases of pulmonary tuberculosis can promptly be discovered. Then they can be tagged so that doctor, nurse, and other hospital personnel caring for the patient will know that they are dealing with a communicable disease.

The aseptic technique used in cases of acute infectious disease should be carried out in the care of the tuberculous patient. Nurses should wear a short-sleeved uniform or have their sleeves rolled up to the elbow. A gown should be worn over the uniform when giving bedside care to the patient, and following such a service the hands should be washed in soap and water. Gauze masks should not be worn, as they may serve to convey infection to the wearer instead of preventing it. A very important thing is the education of the patient to cover the mouth when coughing and the use of paper napkins and covered receptacles for sputum disposal.

The doctors, nurses, and other hospital employees may have tuberculosis, and for that reason they also should have an annual roentgenogram of the chest as routine procedure. If patients and employees who have direct

care of patients are examined as suggested and those with tuberculosis obliged to carry out the necessary precautions the general hospital will become as safe a place to work in as is the sanatorium.

SUMMARY

1. There is a much higher incidence of tuberculosis among nurses, medical students, and doctors during their first years of practice than in the general population.

2. The incidence of tuberculous disease among the nursing and medical staff is less in sanatoria than in general hospitals.

3. The same precautions should be taken to prevent the spread of tuberculous infection in the general hospital as in the sanatorium. This necessitates taking roentgenograms of the chest and sputum examinations of all patients on admission. Every patient with pulmonary tuberculosis should be so designated and provided with facilities for sputum disposal and taught to cover the mouth when coughing.

4. Nurses, resident physicians, and interns should have a roentgenogram of the chest taken when beginning service and annually thereafter. In no other way can pulmonary tuberculosis be discovered in its early stage. The hospital should accept this responsibility.

5. The nursing technique should be that used for cases of acute infectious diseases. Student nurses early in their course should be taught the principles of aseptic nursing technique so that they may safely care for cases of communicable disease. There is no more reason for a general hospital to exclude cases of tuberculosis than there would be to refuse cases of typhoid fever or pneumonia. The spread of infection can be avoided if proper precautions are observed.

6. The general hospital can serve a very useful purpose by utilizing vacant beds for the treatment of cases of tuberculosis. They may serve in one of two ways:

a) In areas where the sanatorium is located at a distance from the center of population or is too small to maintain a surgical department the hospital by setting apart a section for this purpose can serve as a clearing house for the tuberculous cases of the community and provide operating room facilities for those that require thoracic surgery. Patients with progressive disease may be kept nearer home and friends. Cases of the more favorable type can be transferred to the sanatorium.

b) In communities where there is a well equipped sanatorium but with insufficient accommodations to care for the cases awaiting admission, the general hospital can furnish additional beds for such patients as may be assigned to them. The wards or rooms in which tuberculosis patients are

cared for should be well ventilated, have as much sun exposure as possible, and be kept cooler than the temperature usually maintained in general hospitals. In such instances the tuberculosis patients should be under the care of physicians skilled in the modern treatment of tuberculosis. There should be an affiliation or the closest coöperation with a sanatorium medical staff so that the supervision and standard of treatment may be maintained and the interchange of patients made as occasion requires.

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Community Chests

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DURING the War—that is, the Great War, not the present economic war—we instituted in this country what were called "War Chests," Community Chest funds reserved for central financing of "war works." These war works were of a social service character—educational, recreational, religious activities in the Army and Navy. Shortly after the end of the War it seemed, in certain communities, that it would be a propitious time to organize central financing for all social service work. These efforts often originated in the so-called social service or subscription investigation committee or investigating agencies of various business organizations such as Associations of Commerce, Chambers of Commerce, Rotary clubs, etc. These had been generally concerned with the support and planning, to a certain extent, of private social services, including health services. Attention was drawn first to certain purely business considerations, namely, desire for less expensive and more effective methods of raising funds, better control of funds raised, and more purposeful expenditure of monies. The expenditure of money in philanthropy has been the most important problem and continues to be a most serious problem. "He does a much greater work who attends to the proper expenditure of money for charities than those who raise the money and even those who give it." The organization of a Community Chest was then precipitated into the community by a group of business men who were interested primarily in an efficient way of raising and expending funds.

In the general scheme of private philanthropy, we have Jewish and Catholic and Protestant federations of charities, many of which include hospitals and some of which exclude hospitals. As time has gone on, the financing function, necessarily, has had to be somewhat modified, but it is still the primary obligation. The planning function of financial Federations and Chests has, to a larger and larger extent, come into the forefront of activity.

The planning function is of a dual nature—one, the functions of planning of activities within certain fields such as child welfare, family welfare, health work, etc.; and the other, planning of coördination of the various fields in the light of community needs. The latter creates much trouble for any type of institution because it tends to dig up and uproot the activities and beliefs that so many people have in their own function. The function

Read before the Institute for Hospital Administrators, Chicago, September 27, 1933.

of community planning and coördination focuses attention on the human being involved—on the whole human being. For example, here is a child who happens to be today in an orphanage, we will say at the V Home, or in a foster-family. Tomorrow morning he appears in the clinic of such and such a hospital. He is still the same child. The community is not interested primarily in a particular health service or child welfare service that may influence that child today and tomorrow—it is interested in the child as such. We are interested in these individual institutions from the Community Chest or from the community planning point of view, as I view it, not as ends in themselves but as mechanisms or instrumentalities that serve for the purpose of ministering to the population as such. This, of course, is a dreadful thing to say. Obviously such a statement has a tendency to disturb crystallization of ideas, even in planning and financing which have expressed themselves in individual institutions.

The Community Chest has had such a very remarkable growth. In 1920 there were only 42 Chests and they collected in that year the sum of $23,656,000. In 1931 there were 377 Chests in the country—a Chest in almost every important city, although some like Chicago and Boston and New York do not have Chests. The 377 Chests collected a total of $83,213,-428, which is quite a large sum. You understand that, generally speaking, these federated agencies, these Community Chests, give to their institutions approximately half of what they (the institutions) spend. Hospitals, of course, are on a special budgetary basis. Hospitals have received 33% and even 25% of their total income from their local Chests; this was in the days when there was such a thing as income in the hospitals. If one understands that 83 million dollars can be expressed in institutions that are spending from two to three times this amount of money, this sum looms up as a very vital factor in the total scheme of what we call private philanthropy as opposed to the expenditure of tax funds. The great growth and expansion of the Chest as an organization in many of the cities below the very largest of the cities and above the very small cities in the United States has given to the Chests great prestige. This is, of course, generally speaking, not always. Of course, there are individual exceptions. The people who back the Chests feel that the Chests provide an efficient and effective way of doing the work of the community.

In the last few years, the Presidents of the United States (and they were two very different men—Mr. Hoover and Mr. Roosevelt) have felt that the Chests were sufficiently important for them to launch the full mobilization of campaigns for funds themselves. Just two weeks ago some of us went to Washington and listened to Mr. Roosevelt call on the private resources of the country to back up Chests in their endeavor to raise funds. All are called upon to join in these campaigns—the capitalists, the working

people, the white collar class, professional groups, the very school children. An effort is made to spread through the community the exemplar of private charity. It is reasonable to suppose that if such a very powerful weapon as the Community Chest can be forged, not only of good materials, but by hands that are skilled, each can become a very fine instrumentality for the well-being of the community, not only in the social works expressed in the usual kinds of organizations and institutions but in the particularly broad movements that affect the community—a good educational system, a preventive health program.

There are certain criteria that can be applied to these Chests and community planning movements and economies. In the Jewish Federation, which is 35 years old in this country, we have been applying certain criteria which I think the Community Chests may apply to themselves.

1. Leadership, which means personnel, professional and lay.
2. Functional adaptability, which means being able to adapt programs as the times require. The whole problem of community planning and functional leadership is here included.
3. Inclusiveness, which means the inclusion of the major kinds of activities in the community so that the financial Federation or Chest is in effect dealing with the social service work of the community.

It is obvious that if a central organization provides powerful personal leadership and has the financial power and stability to weather severe economic storms, such as the present; if it has the ability to adapt its program so that under given circumstances it can emphasize the appropriate field of activity such as the child welfare or health work or other activities; if it has the planning function in its hands, either in a Council of Social Agencies or in the Community Chest; and if the central financing organization includes most worthwhile institutions, then the Chest can be a very powerful kind of instrument which can be used for the benefit of the whole community and the building up of health programs and for all other social services.

I don't want to belabor this point too much—you feel that your function is peculiarly that of the hospital, but one dealing with many kinds of institutions and varying conditions finds that people become set and that human beings as such and the community as such mean nothing to them. It is the individual task, whether it be the minimal task of purchasing supplies or the greater task of administering to the ambulant sick that seems to be of greatest importance. There are people who have their ideas and have their eyes and minds set on general needs and problems and there are just as many other good people—perhaps more—whose minds are set on the details of carrying out their daily task in a certain place. We can do much to disturb each group—one to understand and appreciate the

details involved in the job, and the other to understand the fundamental reason for the establishment of institutions as such. Competent financing, community-wide planning, sound relationships between the individual field of social work and the Council of Social Agencies as well as Community Chests—these things have all been assets. Certain liabilities are now to be mentioned:

1. The crystallization of certain organizations in the community scheme by giving them money from year to year. Once an organization gets into these (Chest) schemes, it is quite difficult to get it out. By the very instrumentality of central financing, we have crystallized into the minds of everyone certain positive definitions of things. New things do not come into the sphere of interest. It is a pretty radical Chest that goes hunting for new things. Crystallization is very beautiful but in Community Chests it is not valid.

2. The second thing that undoubtedly should be considered is the remarkable and growing distance between the social agency, the hospital, child welfare agency, and family organization—the growing distance between them and the people of the community, not only the contributing public but people in general. The contributing public—and that is a very small part of the great public itself—does not understand in connection with the raising of funds what goes to make up a hospital, what services are given by the hospital, what such services mean in the community, etc.

3. And last, in the Community Chests, you have government by a very conservative group. Those of us who deal constantly with human problems through agency techniques feel the tremendous change that has come, even in physical apparatus. Those of you who can look back 20 years in the hospital field, and look at the hospital of today, know how vitally different your institution now is. Could you have done that—made not only this physical change in the institution, but change in treatment of patients and changes in hospital administration—if your work had been financed by a very conservative group? The community is often not truly represented in the Chest board. There are many professions that have social implications, like the profession of law, of medicine, or of teaching, organized labor, that should have some representation in the central financing of a community's social work program. These groups and their great interests are rarely represented.

Let us see what the hospital has to do with this. Its many problems are, of course, apparent. Many hospitals are excluded from Chests or have excluded themselves for various reasons. Those in Chests have received financial support in several ways.

Some hospitals have received per capita grants somewhat on the same basis as tax funds paid into private hospitals. In these instances payments have been made for the patient-day cost, particularly for the dependent sick. Sometimes this has been on the basis of net additional cost rather than the usual patient-day cost. In some instances, operating deficits as such have been met. Deficits, however, may arise not from a mere decline of operating income but may be due to some extent to bad administration. This makes financing on a deficit basis a bit difficult for a Community Chest.

You know, of course, whatever may be best for your own community—you are familiar with your own community.

The Community Chest and its contributing public are interested primarily in the dependent sick and the borderline dependent group. Those hospitals which, because of medical staff and for other reasons, have been able over a period of years to build up a large paying clientele, and even survive on that basis through a period of depression, may be particularly antipathetic toward the Chest.

Community Chests are going to be particularly interested in the survival of many of the private hospitals because present conditions have so largely increased the number of people who are dependent and the number of those who are on the borderline of dependency. You have all seen statistics which indicate that the number of unemployed has reached as high as 14 million. Assuming that from three to four million have been reëmployed, there are still from 10 to 11 million people who are unemployed. Gradually these people use up their various equities, such as insurance policies, savings, etc., and thus, gradually, a very large group stays in the classification of the dependent or has to be reluctantly placed in that classification.

Beyond this group there is a group that might be termed borderline. These are the people who, when illness strikes, become medically dependent, though they are not, generally speaking, economically as dependent as those that receive relief. These people, who receive low wages and many of whom work only part time, so far as hospitals and clinics are concerned are dependent.

The difficulty about the present situation is that it is likely that we are going to have a very large group of persons who will be permanently unemployed and a very large group of persons who will be on low wages. The groups in these categories are going to be permanently with us and in larger numbers. This undoubtedly means some readjustment of the hospital program, and undoubtedly means greater dependency by the hospitals on both tax funds and private funds raised through Chests or other central financing agencies. The only alternative to such dependency on the part of the hospitals and their receipt of tax funds or semi-public funds would

be to build additional public hospitals. With the large number of beds available in the private hospitals, this would be most undesirable.

May I say a word about relationships between hospitals and other social work agencies? Generally speaking, the medical social worker stands between the hospital and the other welfare agencies. When I use the phrase "stands between" I use it advisedly, because she both interprets the hospitals to these agencies and acts as a bridge across which the agencies might enter or even trample into the hospitals.

Agencies desire certain specific things from hospitals, whether the agencies be family welfare organizations, organizations for child welfare, homes for the aged, or other types of institutions for the handicapped. The specific thing that they wish is a definite medical service, so well interpreted that an intelligent social worker might understand the significance of the medical findings. This function of interpretation belongs to the medical social worker.

On the other hand, the hospital and/or clinic gives the actual medical service. If the service is given in such fashion as to be unintelligible or is given in such fasion as to be inapplicable to the given situation, or, finally, is given in such fashion as to be of no value physically or socially, then, naturally, the social agencies find great fault. On the other hand, medical institutions find fault with the social agencies in asking for a great deal of work which might not be medically necessary, or might be in the nature of an additional burden which the hospital, with the many other calls made upon it, cannot carry.

There is no need of going into elaborate detail on this subject. What needs to be indicated is simply the fact that in serving the dependent population that is also being served by the various social agencies, the whole human being served should be taken into consideration, and there should be a tie-up between the social agency and the hospital so that, ultimately, some reasonable plan is carried out on behalf of these human beings.

An effort has been made in this discussion to indicate not only the entangling alliance that naturally exists between social agencies and the hospitals, but also to indicate that all of the work, both in the social agencies and hospitals and clinics, has to proceed against the general background of community planning. In community planning the Community Chest and the Council of Social Agencies are in a dominant position, and undoubtedly will be increasingly in such a position because of the present economic difficulties in which vast numbers of the population find themselves.

Purchasing Accurate Clinical Thermometers

STANLEY H. OSBORN[1], M.D., CARYL C. CARSON[2], M.S., AND FRIEND LEE MICKLE[3], M.S.

REFERENCES to the use of clinical thermometers date back to the beginning of the eighteenth century. Wunderlich in 1868 published a treatise on animal heat in disease which is the very foundation of our present clinical thermometry. This early physician is said to have found fever a disease and to have left it a symptom.

It has been estimated that two and one-half million thermometers are now sold annually in the United States; the accuracy of such a universally used and indispensable instrument should be of interest to physicians, hospital superintendents, nurses, and health workers. Within the United States clinical thermometers are subjected to legal restriction only in Connecticut, Massachusetts, Michigan, and New York City. Testing records indicate that unreliable thermometers have been almost eliminated from these localities. Without question unreliable thermometers have for many years been unloaded by unscrupulous manufacturers and dealers into those states and cities where no testing regulations exist.

Minute, half-minute, and two-minute markings on thermometers under present-day methods of manufacture usually refer only to the diameter of the bore and neither to the accuracy of the instrument nor to the time required for the thermometer to indicate the correct reading after being placed in the mouth, and thermometers so marked often register more or less quickly than stated. The time necessary for any clinical thermometer to indicate the correct reading depends upon many factors—the patient's general condition, his degree of health, whether he is in a warm room or on a cold veranda, the length of time that has elapsed after eating or drinking, as well as the proximity of the instrument to the mucous membranes—so it is seldom safe to allow less than two minutes for a clinical thermometer to record the temperature of the patient regardless of the accuracy of the instrument.

It can never be assumed that the price asked for a thermometer is a direct indication of the quality, since an unscrupulous manufacturer offering for sale an inferior grade of instrument would undoubtedly ask a high price if it were possible to obtain it. Thermometers offered at ridiculously low prices always should be viewed with suspicion since only untested thermometers and thermometers of inferior grades can be sold at extremely low figures.

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If there is any one phase of the clinical thermometer trade which seems to be peculiar to that industry alone, it is probably the failure of users and purchasers generally to recognize the wide variations existing in the quality of this line of goods, whereas in most other industries the purchaser accepts without question the possibility of purchasing a more inferior grade of merchandise from one manufacturer than from another. Every hospital superintendent and purchasing agent recognizes it is equally possible to purchase either a 100% wool blanket or one of a very cheap and inferior grade containing little or no wool. A similar state of affairs exists in respect to bed sheets, towels, textiles, food, fuel, and a long list of commodities. Yet many times the same purchasing agent seems willing to believe that clinical thermometers which he can purchase at the lowest possible price will give equal service and be of the same high grade of precision as more carefully and expensively made instruments.

That regulations and tests of clinical thermometers were necessary in Connecticut, in Massachusetts, and in New York City is indicated by the early testing records. The first year of testing in Massachusetts the percentage of rejected thermometers was in excess of 20%. During the second, third, and fourth years of testing in Connecticut the rejected thermometers were respectively 16%, 34%, and 22%. In New York City a survey made prior to the amending of the Sanitary Code to control the sale of clinical thermometers showed 54% of those examined to be defective. These thermometers, had they been used by physicians or nurses, would have given readings probably accepted without question as accurate. Certainly hospital superintendents and purchasing agents may well pause to consider the quality of the thermometers which they have been and are purchasing.

To many who read this it may seem unnecessary to go to the trouble of testing a clinical thermometer—a small instrument relatively simple in appearance and so common in hospital use as ordinarily to receive scant attention. This feeling is not surprising when it is realized how little the average user is informed about either the manufacture or the precision of clinical thermometers and that he does not know how inaccurate a clinical thermometer may be when not properly made and rigidly tested.

Tests for the accuracy of a clinical thermometer can be made only with the aid of standard testing equipment. Reliable tests cannot be made by the physician or the nurse in the sickroom. A thermometer that does not register the indicated normal when placed in the mouth of an apparently healthy person is not necessarily inaccurate, for some persons have a lower and some a higher individual body temperature than the "normal" indicated on the thermometer—the average of thousands of observations. If

it registers more than half a degree below normal under such circumstances it may be a retreater and should be tested.

Strangely, there seems to be some generally inherent belief among users of clinical thermometers that any reading obtained from as nice appearing and neatly engraved an instrument as a clinical thermometer must certainly be correct and that it is more or less impossible for it to give anything but accurate readings. Altogether too widespread a feeling seems to exist among users that the inaccuracies which may be present in a clinical thermometer are after all insignificant and not worth the bother occasioned by any control or testing. Ten years of experience in Connecticut have demonstrated that the elimination of inaccurate clinical thermometers by the licensing of manufacturers and the testing of a percentage of the thermometers sold in the state has been worthwhile.

No hospital would dispense with the patient's fever chart; yet if based upon the readings of an inaccurate thermometer the chart is of necessity inaccurate and cannot indicate a true condition. A writer[4] on the subject has said:

> "If there is one manifestation of the clinical condition of a patient that may be called paramount in importance it is the body temperature. It is the cornerstone on which the physician commonly bases diagnosis, prognosis, and treatment; on which the nurse bases her judgment of conditions and progress of the patient. On every history chart the readings of the clinical thermometer occupy the first and most prominent place. These readings, transcribed as a temperature curve, give the most reliable and most quickly interpretable index of the course of the case from day to day. If the reading of clinical thermometers be inaccurate the clinical histories are so much waste paper and opinions based thereon are valueless."

Whether or not a patient shall be confined to his bed—or for how long a time—frequently is dependent upon his temperature readings. If the temperature be taken with a thermometer that does not properly maintain its maximum readings, the chart may fail to show an elevated temperature when the patient's actual temperature is much higher than that shown and when he still should be confined to his bed. The possibilities of serious consequences in such a case need no discussion. In many hospitals the thermometer used by one physician or nurse to take the temperature of the patient at one time during the day will not be the same one used by another at some later hour. Thermometers in everyday use may show errors greater than one degree. In a case like the one just mentioned, if the thermometer used in the morning happened to read low and the one in the afternoon gave too high a reading, a difference of two

[4]Weekly Bulletin of Department of Health of City of New York, Volume IX, May 22, 1920.

degrees in the patient's temperature might be indicated while the temperature remained at the same point throughout the day. It is indeed true that certain minor errors in the reading of a patient's temperature are more or less immaterial but this fact has been kept in mind in developing testing specifications by establishing allowable tolerances that require the thermometers to be accurate enough so that mistakes will not be made in diagnosis and yet are not so rigid as to be commercially impracticable.

There is little doubt that the attention that has been given by many hospitals through their purchasing agents in buying clinical thermometers has not been in keeping with the serious use to which the instruments are subjected. Purchasing agents should not be too highly censured for this lack of attention in the past, since until very recently no concise or understandable standard for an accurate thermometer has been available for general use by purchasers of clinical thermomters. The situation is now capable of correction, so there need no longer be any excuse for the purchase of inaccurate or worthless clinical thermometers by the discriminating purchasing agent. In 1928, the Bureau of Standards of the United States Department of Commerce called a conference of persons interested in the manufacture, sale, use, and testing of clinical thermometers at which the need of purchase specifications and of tolerances for clinical thermometers was given careful thought. Representatives of the Connecticut State Department of Health actively coöperated with government and trade agencies in the establishment of tolerances and specifications which after further revision are now known as Commercial Standard CS1-32. This Commercial Standard has been accepted by all government clinical thermometers, by many of the larger hospitals throughout the country, by the retail and the wholesale druggists' associations, and by medical, hospital, and other national organizations. More recently it has been written into the National Recovery Act code for this industry. Thermometers manufactured in conformance with Commercial Standard CS1-32 ordinarily will be found satisfactory and accurate within the limits specified in the Standard *if they are made by a reputable firm.*

The general adoption and use of the Commercial Standard has marked a forward step in the improvement of objectionable conditions throughout the clinical thermometer industry. The Standard provides definite specifications and tolerances to which thermometer purchasers, jobbers, and retailers may demand adherence by the manufacturers.

While reputable manufacturers will deliver thermometers which pretty generally meet a specified standard, experience in Connecticut shows that unscrupulous manufacturers and dealers will at times deliver definitely inferior instruments. To eliminate this, some form of testing is needed to make the Commercial Standard fully enforceable. In Connecticut,

Massachusetts, and Michigan the manufacturer is held rigidly to established tolerances by frequent tests of samples of thermometers which have been offered for sale.

The Connecticut clinical thermometer law, a licensing law, allows the sale of clinical thermometers in the state only by authorized manufacturers. Clinical thermometers offered for sale by these manufacturers are identified by the two words "CONN SEAL" which are engraved on the stem of the thermometer. A designating letter assigned to each manufacturer and distinctive of his product is engraved between the words "CONN" and "SEAL." All clinical thermometers marked in this manner are manufactured in conformance with specifications and tolerances promulgated by the Connecticut State Department of Health. Each manufacturer's product is checked from time to time by testing lots of his thermometers which he has sold in the state. When repeated tests indicate that a manufacturer is offering for sale thermometers which fail to meet the Connecticut specifications, he is called to attend a hearing before the State Commissioner of Health to show cause why he should not forfeit this CONN SEAL privilege.

During 1933 the Connecticut thermometer law was revised, as were the specifications and tolerances for CONN SEAL clinical thermometers. The Connecticut specifications and tolerances are consistent with those of the Commercial Standard and offer a definite standard of quality for the benefit of clinical thermometer users in this state.

Recent developments offer possibilities whereby in the future the purchaser of clinical thermometers—whether for individual or institutional use—may be assured of accuracy and reliability when purchasing these instruments, whether or not he resides in Connecticut or in territory where no legal restrictions are imposed. Already Government agencies and institutions, including the War, the Navy, and the Treasury Departments, are able to purchase satisfactorily under the Commercial Standard using the Army and Navy testing laboratories and those of the Bureau of Standards to insure that manufacturers adhere to the Standard.

Except for those persons or institutions having ready recourse to testing facilities, it is as yet impossible for the individual hospital or other purchaser, in states and cities that do not have clinical thermometer laws, to be definitely assured of receiving instruments which strictly conform to this now widely used and generally accepted Standard. An eventual solution of the problem seems to lie along one of three lines: (1) a national licensing system similar to the Connecticut licensing system, (2) some form of governmental compulsory test, (3) the adoption by large group purchasers of clinical thermometers of the policy that a stated percentage of thermometers purchased under Commercial Standard CS1 shall

be tested in a control laboratory other than that operated or controlled by the manufacturer or dealer.

The first two of the suggested solutions have been repeatedly before the thermometer industry looking toward legislative enactment, without noticeable success to date. The third proposal perhaps offers a more ready solution. The necessary testing under this last proposal might be secured either through some existing governmental or other laboratory or by the establishment of control laboratories to meet the need. That a need exists is evidenced by the fact that while many hospitals and institutions are now purchasing under the Commercial Standard, very few as yet have any means of knowing that the manufacturer is fulfilling the requirements of the specifications. The experiences of the writers indicate that this latter provision is necessary if the purchaser always is to secure reliable instruments. Here lies an opportunity for some influential national organization or group to foster legislation or develop a means whereby the purchaser may be assured that clinical thermometers purchased under specifications of proved value are actually meeting the tests required in the specifications. When that is accomplished a very forward step will have been taken.

THE WOMEN'S COLLEGE HOSPITAL, Toronto, has received a grant of $200,000 from the City of Toronto, $100,000 from the Ontario Government, and a similar amount from the Dominion Government, and has commenced the erection of a new hospital building.

TORONTO GENERAL HOSPITAL is the recipient of the sum of $100,000 from the Salada Tea Company, in memory of the late P. C. Larkin.

Hospital Problems and Social Work

THE ORGANIZED CARE of the sick in hospitals and clinics, particularly the indigent sick, is essentially a social activity and a social problem. Historically it has closely followed the religions of the world's peoples and in most instances has preceded their educational systems. It has attracted in all countries the personal endeavors as well as the private philanthropy of those of high as well as of low estate. It was not founded upon the duty or the responsibility of the more fortunate to take care of the unfortunate of their friends and families, but upon the compassion that the more civilized of the world's peoples have always had for the sufferings of humanity. Authoritative Japanese history records the labor of an Empress in caring for the sick poor of her people more than 2,000 years ago, and describes, among her ministrations, how she withdrew the pus from the lepers' sores with her own lips. More recently, during a yellow fever epidemic in one of our southern cities when all who could had fled and only the indigent and immune among the citizens remained, the leading exponent of the world's oldest profession turned her house into a refuge for the stricken poor, and she and her maids cared for them until she herself became a victim of the scourge and died. Some 15 years ago the leading citizens of this southern city erected a monument above her grave as a memorial to her sacrifice for the indigent sick.

And so the universality of this phase of social work runs through the world's history, since the world has progressed from savagery when people abandoned their sick poor to the beasts and vultures or mercifully ended their sufferings by knocking them in the head. Since then, through their mercy and compassion, civilized people have succored their sick and infirm poor and helped them back to health.

This great social movement, much older than modern civilization, has materially softened the color tones of the dismal picture which authors and philosophers limn when they talk about "man's inhumanity to man."

With the advent of the Christian fathers, with the rapid development of medicine, and the closer organization of peoples and tribes as political divisions, the care of the indigent sick became more and more the responsibility of the state, and somewhat less the manifestation of charitable and philanthropic altruism. The economic advantage of conserving and restoring the health of the "sick poor" rather than destroying their lives when they became infirm was better appreciated and Governments began to exercise an increasing paternalism over their people, a majority of whom were indigent. Not only that Governments might become powerful in war but that in times of peace their people would enjoy the blessings of a

prosperous life in commerce, agriculture, manufacturing, and the arts. They no longer depended entirely upon the mass to carry on this essentially great social work but recognized that when and if the mass failed, then it became the responsibility and the duty of the state to bring to its people, the well-to-do as well as the indigent, the benefits of a conserved health and proper medical and hospital care when health failed them.

The state appreciated that the mass effort in taking over this important function for the welfare of the people might often fail both in resources and in purpose, and that mass effort, unless directed by independent and highly specialized individual leadership, too frequently creates chaos.

Inception of the Modern Idea

The modern hospital idea, in which has been developed the facilities for the care of all classes—the rich, the middle, and the indigent—together with the plans for the financial support of our hospitals, is about 200 years old[1]. It probably had its inception in England early in the eighteenth century. Previous to that period, hospitals were operated almost if not entirely for the care of the sick poor who were acutely ill, as well as for the custodial and the domiciliary sick. Our own hospitals of 150 years ago made few if any provisions for the care of any other class of patient, or provision for the care of the rich or middle class patients.

For the past 50 years, beginning shortly after the Civil War, the hospital system on this continent developed rapidly, with its greatest development within the last 25 years. The amazing progress of medical knowledge, the systematic study of communicable disease, the movement of population from rural to metropolitan centers, and the surprising impetus to develop religious, educational, and other welfare activities were directly reflected in the growth and number and the increase in use and efficiency of our hospitals.

Use of Hospital Facilities

In continental United States there are today 6,437 hospitals. Distributed as to support, 1,776 are governmental tax-supported institutions and 4,661 are voluntary hospitals supported by philanthropy. There are good hospital facilities available for 98% of the population of this country within a proximity of 25 miles of their homes. The 4,661 voluntary hospitals receive no direct support from Federal, state, county, or city tax revenue sources. They are owned and supported by church, fraternal, and industrial organizations or by associations of philanthropic citizens of their com-

[1]EDITOR'S NOTE.— The English hospitals did not make provision for the care of the rich and the middle class patient until about from the beginning of the present century. Organized plans for supporting voluntary hospitals through private philanthropy probably had their inception in England at the time stated.

munities. These hospitals are charitable, welfare, and educational institutions owned and supported by society and in no part whatsoever by the state. Their income is derived from three sources only: first, the payments made by patients for their care, second, the contributions from charitable citizens and organizations, and third, a comparatively small income from their endowments. They have a total of 435,000 beds. The income from their endowments in normal times would support less than 17,000 of these beds.

In 1933 a little over seven million patients were admitted to all the hospitals in this country. Thirty per cent, or 2,100,000, were admitted to governmental hospitals—Federal, state, county, and city institutions. Seventy per cent, or 4,900,000, were admitted to the voluntary hospitals. In the prosperous era of the '20's 15% of the service in voluntary hospitals was given to charity, to the care of the indigent sick, from whom no remuneration was received nor expected. In 1933 the charity load was increased to more than 40% and seems to be increasing. In addition to this service, the out-patient departments of the voluntary hospitals treated 26 million patients, practically all of whom belong to the indigent class.

There has been a constant shift of patients, who in better times paid for their hospital care as private patients, to the wards and charity service in our voluntary hospitals.

The cultural and economic relationships of hospitals with the social side of our national life are strongly emphasized when it is recalled that they have constantly in training for nurses 50,000 young women, the pick of their communities, more than 5,000 medical graduates receiving post-graduate, intern, and resident training, and a large number of dietitians, social service workers, and laboratory technicians preparing for their vocations. In addition to all this, more than 600,000 people are constantly employed in our institutions.

It costs $475,000,000 annually to operate our voluntary hospitals. They received as reimbursement for the care of patients in 1933 $215,000,000—less than 50% of the cost of their operation. Their income from philanthropy, including endowments, Community Chests, and other public contributions, amounted to about $195,000,000. The voluntary hospitals of the country experienced an average operating deficit in 1933 of $150 a bed, or approximately $65,000,000. This deficit was incurred in spite of drastic economies in the hospital payroll, in the neglect of desired repairs and improvements to plants, in greatly reduced purchases for replacements of furniture and equipment, and other operating expenditures. The deficit is reflected in large withdrawals from capital funds or from endowments, in money borrowed to meet the operating disbursements, and in the increased extension of credit by commercial concerns. The deficit was

largely, if not entirely, due to the increase in the load of charity patients from 15% in 1929 to more than 40% in 1933.

Voluntary hospitals, by the purpose and scope of their organization, are traditionally institutions of charity. They serve the public welfare. They make no profit. No monies received accrue to the financial benefit of any trustee, member of the staff, or any other person. Every dollar of income goes into the betterment of plant and equipment or is devoted to increasing their facilities for the care of indigent patients. The moment they depart from their traditional character as institutions of charity, that moment hospital meaning to our people, both patient and philanthropist, will be lost. Hospital efficiency will suffer and the breakdown of the entire voluntary hospital system will result.

It is a trite but not altogether truthful saying that only the very rich or the very poor secure good hospital and medical care. However pertinent this has been in the past, it is in no sense true now. The class of people which the physician and the hospitals have an equal interest in and take equally good care of are those in the low income and salary classes, many of whom are being forced into unwanted charity for economic reasons, or by their own inclination through a mistaken governmental paternal policy that is pauperizing too many of our population. This may be and is quite likely to be a continuing program for many of our people, but the vast majority do not want to enter the charity class, nor, if they enter, to remain longer than is required to work their way out.

Reëstablishment of Financial Stability of the Temporarily Indigent

To this numerically important and right-minded class of our people society and social workers owe a duty that they should not be slow in discharging. The generous policy of the Federal Government, whether wise or mistaken, cannot continue always, and soon the responsibility which it has assumed must be shifted back, first to the state, then to the community, and finally to the individual himself. To arrive at this ultimate and certainly desired solution, the group engaged in social welfare work, and its affiliates, must concentrate the best thought and the most earnest endeavor. Permanency of concerted policy and effort must replace the expediency of the moment if real progress is to be made, and if the self-respecting, self-supporting, honorable citizen of tomorrow is to replace the unwilling indigent of today.

Hospital authorities feel that much to this end can be accomplished by encouraging thrift and through the prudent application of a small part of the personal or family income during the period that the potential patient is in health and employed, against the time that accident or illness makes his admission to the hospital necessary. The even distribution of anticipated

costs through small periodic payments made by the individual in many instances, or by organized groups of individuals vocationally affiliated, for a majority of our wage-earners will, in a manner that is actuarially sound and inexpensive, provide for the uncertain and unexpected costs of hospital care, and so far as hospital costs are concerned will remove the patient from the indigent class to the self-supporting, pay-for-what-you-receive class to which he properly belongs and in which he prefers to remain.

Over an average of years, out of every 100 of the population, from 8.5 to 9 will have a hospital experience each year. The average length of stay of these patients in hospitals is very close to 11 days. The incidence of illness requiring hospitalization does not vary greatly in different income groups. Excluding indigent cases, it costs a family of 3.8 persons an average of about 3% of the annual family income to cover the entire cost of illness, including physicians' services, nursing, drugs, and hospitalization when necessary.

Incidence of Illness in 8,677 Families

An interesting study made by Drs. Armstrong and Dublin and Miss Elizabeth J. Steele of the Metropolitan Life Insurance Company, covering 8,677 families, shows that 7,591 families reported illness necessitating a physician and 1,682 families reported illness that required hospitalization. The entire number of families reporting illness spent a total of $854,343 for the costs of illness during a 12 months' period. The number of families whose illness required medical care spent $737,310, 42.4% of which, or $212,619, was spent for hospitalization by the 1,682 families who required hospital care—an average expenditure of $102.05 per family for hospital care for the 12 months' period. The number of hospital cases in these 1,682 families was 4,519—an average payment per hospital case of $46.38.

The following table shows the percentage of families in the specificed income class in the group surveyed by the Metropolitan Life Insurance Company, and for the population of the United States in 1928.

Family Income	*United States 1928*	*Metropolitan Employees 1930*
All incomes	100.0	100.0
Under $1,200	15.0	.1
$1,200 to $2,000	34.8	5.6
$2,000 to $3,000	24.6	35.1
$3,000 to $5,000	15.7	50.4
$5,000 to $10,000	7.0	6.9
$10,000 and over	2.9	1.9

It covers, excluding the indigent group, the so-called "Mr. Average Citizen" group, with which the hospitals are very much concerned and for whom they desire to provide an efficient hospital service when and as needed without provoking an economic tragedy in the family finances.

Charity Service and the State's Responsibility

Taking the state of New Jersey as an average typical population for the major portion of the United States, we find that there is an increase in the admission of ward patients, most of whom were indigent, from 61% in 1929 to 67% in 1932, with the number of ward patient days increasing from 1,530,437 in 1929 to 1,736,741 in 1932—an increase of 206,304 patient days, or 13.5%. This includes 48 large general hospitals in the cities of northern New Jersey. Thirty-five general hospitals reported outpatient visits of 638,637 in 1929 and 951,372 in 1932. The operating deficits for the 46 hospitals in 1932 are reported as $5,438,621.

New Jersey is one of the two or three states—New York is another—in which the state poor law distinctly recognizes that "the community has a definite and fixed responsibility to provide necessary hospital treatment for the indigent sick." In New York the state statutes fix this responsibility and make it mandatory upon the community to provide adequate hospital care for its indigent sick. Other states have laws which to a much less degree than in New York and New Jersey charge the community with some minor responsibility for the care of indigents. It is only fair to assume that, other agencies failing, the responsibility for the hospitalization of the indigent sick becomes the responsibility of the state; that the responsibility for caring for the middle class patient who can pay in part or in whole for his hospital care is the responsibility of the hospital; and that the hospitalization of the well-to-do is their own responsibility.

So long as voluntary hospitals were receiving the philanthropic support that they have received during more prosperous times, they could assume a very heavy burden of care of charity patients and operate without serious deficit, but philanthropic support has decreased until it has almost disappeared. The income of hospitals from gifts and benefactions, not including monies from Community Chests and other public subscriptions, has dwindled from $135,000,000 in 1930 and 1931 to $86,519,000 in 1931 and 1932, and less than $40,000,000 in 1932 and up to June 30, 1933.

The problem of hospital care for the indigent sick is one that must be speedily solved. The tax-supported institutions are filled to their capacity and have long lists of patients waiting for admission. The voluntary hospitals are averaging a bed occupancy of under 55%, and 50% or more of their patients are cared for either without any reimbursement or at a charge much less than the cost of service rendered. Voluntary hospitals

have been denied any relief from participation in Federal and in many instances in state funds for reimbursement for the cost of the care they give indigent and unemployed patients. They have struggled along in the face of mounting deficits, hazarding their future security and the permanency of their institutions, in maintaining hospital service on a high plane of efficiency and in assuming this vastly increased load of charity patients.

A participation in the tax revenues of the city, county, states, or Federal governments through this period of economic readjustment and at least to the extent of the cost of the care of the charity patients coming from families on the relief rolls, who are in need of hospital care, would in all probability bridge this difficulty and prevent the breakdown of the voluntary hospital system in this country. There are not sufficient hospital facilities in the metropolitan centers of the country, in the tax-supported institutions, in the municipal and county general hospitals, to take care of the indigent sick who apply to them for admission. If it had not been for the voluntary hospitals' service to the sick poor during the past three or four years, the people of this country would have suffered beyond any conceivable measure. Thousands would have died for lack of hospital service which under our system of government is the right of every citizen when he is in need. Epidemics would have invaded our rural communities and our cities, and the morbidity of our people, with all the misery and hardship that goes with it, would have been greatly increased.

To those engaged in social work the health of the people must be their first concern. With sickness in every home, every public welfare activity falters and sometimes fails. Poverty with all its terrors becomes unbearable when disease adds its burden, and the poor are denied medical and hospital care.

It is your problem and ours to turn the tide of dependency into the current of economic security. To that end the hospitals, public welfare workers, sociologists, and social economists must work with the closest coöperation and the fullest understanding of the problem which confronts us.

Trends in Nursing Today[1]

EFFIE J. TAYLOR
President, National League of Nursing Education

DURING THE LAST FIVE YEARS nursing education has undergone a scrutiny more searching than ever before in its history. This scrutiny has penetrated to its very core and has radiated like the spokes of a wheel in every direction from the center to the periphery. As this great wheel of nursing turns rapidly on its axis it brings into contact the community supply and demand for nursing service. This tremendous force acts with discriminating judgment and accepts or rejects the product of our nursing schools in accord with the needs of the community and the standards of public opinion. The lack of balance in the picture before us is one which even the most sanguine and optimistic must view with grave apprehension.

In the New England states alone the oversupply of nurses is such that it will require years of adjustment and prosperity to provide employment for those our hospitals, largely for expedient reasons, have turned out into the world with credentials for earning a living but with no prospects of doing so.

It is quite true that some of the present population of unemployed graduate nurses are unemployable, but while some are unemployable because of age or mental and physical infirmities, many are unemployable because they have never been adequate, either at the time of selection or during the period of testing. I am confident that there are many superintendents of nurses within sound of my voice today who are agreeing with these statements and who are thinking not only of the one but of the many students they felt forced to keep to meet their obligations in providing nursing care for the patients within the hospital.

> "'Tis true, 'tis true 'tis pity;
> And pity 'tis, 'tis true."[1]

We have all been face to face with this problem and have hoped that some kind fate would intervene and save us from the necessity of making a decision or of "bearding the lion in his den" when the question of eliminating students who were poor material, but useful, was weighing heavily upon us.

Now when we are confronted with a serious situation of unemployment, and with an inadequate and incompetent group of professional nurses

Read before the New England Hospital Association, Boston, February 16, 1934.

[1]Hamlet, Act II, Sc. II, Line 96.

unable to meet the new demands in the evolution of modern medicine, we look back and wonder not how this chaotic situation has come to pass.

In comparison with the thousands of nurses now graduated and practicing nursing the number of outstanding women in the profession is indeed small, but science tells us that in comparison with the rank and file in any professon or vocation a similar proportion is always to be found. In the present crisis it seems to be particularly important that women of unusual ability should be brought forward and every effort made to give them support and opportunity to prepare themselves to take the place of the splendid women who were the pioneers in nursing, the leaders who fought for their ideals in the face of tremendous odds. Some of the early nurses have finished their work and have passed on. Some are now retired from active service. Others are still giving counsel and inspiration, pointing the way, and blazing new trails.

May I take a moment to do honor to a few of the women to whom we owe a debt which can never be paid. Many of these women you know and with some, perchance, you have had the honor to be associated. I wish indeed that instead of merely naming these marvelous personalities, time would permit me to sketch their accomplishments, or in a series of tableaux bring them before your vision as I present their names.

There is no one here who has not heard of Isabel Hampton Robb, the first great leader in nursing education in this country. It was due to the foresight of Isabel Hampton that the first National Society of Nurses was organized in America at the first World's Fair in Chicago in 1893. She also organized and directed the school of nursing in Johns Hopkins Hospital.

Adelaide Nutting, who when presented with a Master of Arts degree in Yale University was characterized as one of the most useful women in the world, was the first professor of nursing in any university and established the graduate courses in nursing in Teachers' College, Columbia University.

Annie W. Goodrich, dean of the school of nursing at Yale University, you all admire and know as the foremost leader in securing the undergraduate education of nurses within a university on a university level.

History will reveal to those who come after us to what an immeasurable degree nursing education was developed through their creative vision and courage in the face of tremendous obstacles and opposition. Among other women whose names are known and beloved in every school in New England and elsewhere, for the contribution they have made, are Linda Richards, Alice Fisher, Louise Darche, Diana Kimber, Anna Maxwell, Lavinia Dock, Lucy Drown, Isabel McIsaac, Mary E. P. Davis, Mary Riddle,

Sophia Palmer, Jane Delano, Lillian D. Wald, and Mary Gardner. These and many other representative women, marked leaders in the profession of nursing, have followed in the footsteps of Florence Nightingale and, like her, have given us ideals of nursing which will guide the many generations yet to come.

I may be pardoned for some digression but the title of my paper, "Trends in Nursing Today" gives me considerable latitude, and you no doubt will be refreshed as you wander back in memory to experiences you enjoyed with some of those whose names I have recalled. Though we have for a moment been guilty of wandering we will return to our main discussion and to the several points at issue in the conflicting relations which exist between the number of nurses available and the community need for their services, but as has consistently occurred in past situations we have faith that regulatory measures will suggest themselves and it is these that we are seeking.

One of the most hopeful indications that times are changing and that the trend is toward the solution of some or many of our mutual problems, inherent in the complexities of nursing service and nursing education, is that a better understanding is observable between the hospital and nursing administrators and educators.

Someone recently made the remark that nurses were now coming to the hospital meetings without chips on their shoulders. It occurs to me, as I have had the pleasure of attending some of the national meetings, that the compliment might be returned and the same be said of the medical and hospital groups. Eventually time may show that, inconceivable though it may seem, it is possible that hospital administrators and nurse educators may come together on an impersonal professional basis, to *study*, not to defend, their mutual problems. In the not far distant future they may be able to discuss their differences of opinion on the broad basis of fact rather than on the narrower basis of defending what is, whether or not they have convictions that what exists is right, fair and equable.

To deal fairly with common problems concessions must be made on all sides. There must be patient waiting for decisions. There must be painful self-denial. There must be curtailment of cherished wishes and desires, and last but not least there must be self-analysis to determine how far differences of opinion are based on what is right or on what we wish right to be.

The thorn in the flesh is the school of nursing which is established in the hospital, having as its primary function the maintenance of a nursing service. The function of a school and the function of a nursing service are not entirely in accord and it is through this discord that many of the

problems and differences of opinion between hospital administrators and nurse educators have arisen.

The trend today based on a study of conditions is to close many nursing schools, particularly those connected with small hospitals, and since 1931, about 154 hospital schools have been eliminated. To many hospital executives this will precipitate some painful surgery. It will no doubt, on their part, necessitate a good deal of discussion to convince hospital trustees that in small hospitals with limited facilities for teaching money can be saved through providing graduate services rather than in maintaining schools of nursing established on a level sufficiently high to be worthy of the name of school.

Small hospitals, however, are not exclusively those which are recommended to replace their schools by a graduate nursing service. Scattered all over the country in almost every state there are schools, large and small, which should be closed because they are inadequate in facilities, equipment, experience, and in staff to carry a program of teaching on an educational level. These are the schools which are graduating each year innumerable nurses whose names remain on the registries day after day, who receive only a very limited amount of work and are in consequence almost without the means to live.

Recent studies of registries reveal the fact that the young nurses, the recent graduates, form the largest per cent of the unemployed in many states. Those holding positions before the depression and those who were known to physicians and engaged in private duty are still those who are receiving whatever work is available. The young nurses and the older nurses are those who are suffering the most keenly.

In the state of Connecticut with the approval of the Civil Works Commission a survey was made to ascertain the number of nurses who were unemployed. Letters were sent to 5,553 nurses registered with the State Department of Health. From replies received it was found that over 500 nurses were out of employment.

The majority of these unemployed nurses were graduated from schools of nursing since the year 1929, and 239 nurses were between the ages of 20 and 29 years. Among this group are the most active, the most recently trained, and presumably those best fitted to meet the heavy demands which might be placed upon nurses in any community. Of those unemployed who answered the letter, 363 were private duty nurses. Of this same group 170 had had less than 60 days of employment during the past year. Yet in the light of these figures Connecticut schools graduated last year approximately 470 students to add to this number. Other New England states undoubtedly would tell a similar story.

It is not entirely accurate to use the same argument in suggesting the closing of larger schools which might be used for the closing of smaller schools. Without doubt there are many large hospitals throughout the country saving considerable money through maintaining schools of nursing. These are the hospitals in which the major portion, if not all, of the nursing service is provided by student nurses.

Perhaps, however, the same argument, viz., financial increase, might be consistently used if these schools were really placed on an educational basis. Such procedure would necessitate the employment of many graduate nurses to stabilize the nursing service, in order that students might be released from excessive responsibility and have hours compatible with study, that their training and experience might be made selective and in accord with educational policies.

If nursing education in a broader interpretation than simply bedside care is basic in the course of study the cost of maintaining such schools will be materially greater. It is therefore a question as to whether a school maintained on a higher basis would be a financial asset to any hospital unless the school were especially endowed. Where accurate studies have been made we are informed that the majority, if not all, of the hospitals conducting nursing schools do save money through the use of student service.

Hospitals, in defense of their schools, can no longer present the argument that the country is suffering from a shortage of nurses. Even before the depression there was great unemployment among nurses and the schools were turning out approximately 20,000 nurses per year. Neither the mortality among nurses nor the demand for their services justified so great a number, and thus the oversupply increased until today it is a tragedy and an economic waste for which we are responsible.

At a recent hospital meeting in a neighboring state some discussion was carried on relating to the oversupply of nurses. Several hospital executives questioned the statement that an oversupply existed and based their opinions on their own local communities. No doubt in certain districts and in many localities it is true that no oversupply exists, but the reasons are obvious. Frequently young women enter their own local hospitals for training. They have attended the local high schools and it is natural that they should prefer to enter the school with which they are acquainted or the school their parents wish them to enter. Usually they know very little about what constitutes a nursing school. By the time a student has spent three years in a school her eyes have been opened and she is awake to the broader opportunities in fields of nursing. In the majority of small towns the demands for service after graduation are exceedingly limited. For this reason and also in pursuit of new and better experience, the

young graduate goes to the city to supplement her inadequate education, and remains only seldom in the local situation. Consequently there is no oversupply of graduate nurses in some vicinities. Studies have demonstrated that nurses as a rule do not usually remain in their own local communities in appreciable numbers except in communities where graduate nurses are employed in the hospital on staff duty, or where for some exceptional reason the demand and opportunities for the special duty nurse are unusual.

It is probably true that many nurses now unemployed who are employable might be given work if all the people who required nursing service could have it and if the distribution of nurses were adjusted according to the need for nursing care. To very great advantage hospitals might employ their graduates in order to increase the number of hours of nursing care which patients in these institutions now receive, and also that the hours of service contributed by individual nurses per day might be materially reduced. To provide this more adequate nursing care some plan for using nurses might be devised by which patients in the hospital and in the home could receive the care they need, whether they reside in rural or urban districts. Such a plan could be developed only through an organized movement for medical and nursing care financially supported through community or government resources or through some form of health insurance in which every citizen would participate for the common welfare of all. Group nursing, hourly nursing, private duty nursing on an individual basis, cannot in all sections of the country meet the needs of those who require nursing care in the way and at the time they need it. Neither can it bring to the individual nurse an assurance that work will be provided in any regular way.

As the trend in thinking today is toward the organization of forces for any successful and effective enterprise, the health and welfare of the community would seem to be best and most economically secured through organized health centers and community bureaus of nursing. Here the work and the individual worker might be kept in touch with progressive trends and developments in all phases of nursing. Nursing then could be made available in any quantity desired, for which proportionate payment would be made and no one would be required to pay for more hours of nursing service than his condition required. Such an organized scheme would make nursing not, as it now is, available to "the well-to-do on an individual basis, and on a community basis to the poor," but to everyone in any or all social strata at a cost which would come within the reach of everyone who required the services of a nurse.

Dr. Michael Davis in discussing public responsibility for the education of nurses compared the way over which medical education had traveled

and stated that "nursing education is now in the position that medical education was 30 years ago . . . The trouble does not lie merely in the fact that we have, even in prosperous times, too many student nurses, too many training schools, too many poor training schools, too much unemployment, and low incomes among nurses. The real vice of the position is found when we go behind the facts to the cause of all of them. We have dangerous and destructive inflation in nursing, and we have it because the production of nurses is going on without reference to the demand of the public for nursing service. The incentive to training nurses now rests, not upon educational demands nor upon public need, but upon the demand of hospitals for nursing and maid service which they get from student nurses.

"To deal with the evil we must reach its root. Higher standards for nursing education, laid down by law and enforced by state boards, are only means to an end. The closing of training schools in hospitals which have neither the equipment nor the point of view to give good training is only a means to an end. The end is that nursing ought, like medicine and teaching, to be regarded as a dignified and essential profession for the education of whose practitioners educational institutions are to be responsible."[2] Now these problems, stated so well by Mr. Davis, are those which together we must solve.

The hospitals, not being educational institutions but rather community health and sickness agencies supported in many different ways, but rarely engaged in the making of money, are not charged with the responsibility for developing educational enterprises. Education not being a primary function of hospital administrators, few are deeply concerned with it in concrete form. If, therefore, neither hospitals nor hospital administrators are primarily concerned with education, for what reason do hospitals set up within their midst machinery for conducting schools? As institutions charged with certain definite responsibilities in the allocation of funds, hospitals have one excuse only for using community money for educational purposes. That excuse is service or advantage to the institution in maintaining its primary function, and sufficient evidence is available to prove that hospitals profit materially through the service of students in schools of nursing. It is well known that schools of nursing are rarely established on a sound financial basis.

When Mr. Paul Fesler was president of the American Hospital Association, he was invited to speak at a biennial convention of the nursing organizations on "Hospital Nursing Costs—How Are They to Be Met?" In his address he stated that "For years nurses have been trying to per-

[2]Davis, Michael M.: Public responsibility for the education of nurses, *Am. J. Nursing*, **33**: 694-700 (July) 1933.

suade hospital superintendents to set aside definite budgets for nursing, and to agree to policies of nursing education in accordance with approved curricula and ideals. Most of the superintendents would agree with these ideal arrangements if they were not limited by lack of funds." He also said, "Many articles have been written citing statistics as unquestionable evidence for the support of educational ideals, but somehow all arguments seem to fail when they meet financial barriers. I believe most hospital superintendents would favor a very high standard for education, but are unable to lead their boards to see that the expense is necessary. The apprenticeship system is a habit in the hospital operation, and will only be removed by a radical operation. It is up to the members of the Grading Committee and the League of Nursing Education to force the hospital superintendent to appeal to the board for support to save the hospital from disgrace. We are absolutely helpless in an approach for funds for improved education without a definite standard for our schools."[3]

If the facts stated by Mr. Fesler are true, and it is evident that they are, why continue schools of nursing on such unsound and unstable bases? Hospitals, unless subsidized or especially endowed for educational purposes, cannot meet the standards prescribed for nursing education. Why not, then, delegate this responsibility to institutions whose primary function is the education of students and jointly form a coöperative association between the hospital and the college, the university, or some other suitable educational institution? Through such affiliation students would be assured of education in nursing schools.

Until public opinion is established as to the payment of tuition for an education in nursing, the apprenticeship system will continue to endure. The profession of nursing exists for service to humanity. Education for nursing, therefore, is partly a community responsibility and might justly receive support from public or state funds.

Again, public opinion should be created against a system which when analyzed is undoubtedly unjust. Hospital trustees and boards must be convinced that the practice of apprenticing student nurses to service in the name of education is unfair to the student, though it may be an economic asset to the hospital. It is doubly unfair to the prospective graduate, and grossly short-sighted in community interest, to continue to train nurses in such excess that they have now become a burden upon the profession and upon society.

Today the trends should be toward the training of nurses according to community need and resources, in selecting students, not for their immediate and intrinsic value to the hospital, but for their ability to become

[3]Fesler, Paul H.: Hospital nursing costs—How are they to be met? *Am. J. Nursing*, 32:637-639 (June) 1932.

valuable and useful workers in the community. The trend should be toward the placing of responsibility for education where it belongs, toward the securing of funds to establish joint relationships between the educational institution and the hospital for the education of nurses, and in creating public opinion favoring the provision of adequate funds for the maintenance of a graduate nurse service in the hospital and also in creating public opinion favorable to the idea that students in nursing should meet at least a part of the cost of their education through personal responsibility for their tuition.

We are hearing a great deal today about shorter hours for all classes of workers. Scientific studies have demonstrated the need for change and variety of activity in the lives of human beings. Nursing has been reluctant to affirm its right to consideration because of the hardship to its clients in meeting the cost for service which a shorter day would necessitate.

Primarily for financial reasons students and graduates in schools of nursing and in hospitals have been required to serve for long and tedious hours. The trend in thought today is toward a more common-sense and fair-minded point of view. No longer is it universally expected that because nurses are trained for their work they are therefore trained for superhuman endurance. There was a time when families looked upon themselves as exceedingly thoughtful and generous when they relieved the nurse caring for a sick member of the family, for from two to six hours out of the 24 for sleep and recreation.

It is thus easily understood why many nurses have developed into routine technicians, uninformed on the current events of the day, and unable to take part in the social and intellectual life of the family or the community. Nurses themselves are now alive to the handicaps under which they were trained and they are endeavoring to achieve standards more in accord with those which guide the conditions of work in other professions. Nurses realize that they cannot meet the requirements of modern ideals in nursing, if they are to be kept at the wheel for 10 to 12 and sometimes 14 hours per day.

The trend today in schools of nursing and hospitals is toward not more than a 48-hour week and in private duty an eight-hour day. An article entitled "The Eight-Hour Day Makes Progress," printed in the December 1933 issue of the *American Journal of Nursing,* presents the subject in several interesting and helpful aspects.

Under the new and interesting codes which are being worked out by nurses themselves, in different parts of the country, sometimes in coöperation with registries, hospitals, and many members of the medical profession, a scale of rates and hours is being devised which will make possible a

new type of schedule in the home and in the hospital in the private duty field, for both nurses and patients. Experiments are being carried on in several places, with evident satisfaction to those participating, and the eight-hour day for private duty nursing must soon become an accepted institution.

The hospital can materially aid in making the plan acceptable by upholding a humanitarian point of view and by coöperating in reducing to the minimum certain hospital charges made to patients. Chief among these is the charge made to patients for the board of their private duty nurses.

In a recent interview with a hospital in which a number of private duty nurses were engaged it was intimated that the hospital could not reduce the price of board charged to patients for their special nurses as it would mean a loss in revenue on which it absolutely counted of approximately $50,000 per year. Is this a legitimate source of revenue? This question in each institution will bear considerable thought and some investigation.

If we hope to bring about changes essential to meeting the conditions imposed upon us as health and welfare institutions, facts must be made public. It is therefore incumbent upon us to accurately determine and present the real financial state of affairs in relation to hospital nursing service, if the public is to be convinced that more money is required.

The cost of medical and nursing care to the patient is very great but at the same time the strain placed upon the workers by long hours and small remuneration is tremendous, and to be consistent with advancing ideals and trends we cannot afford to continue to use a system so obviously poor largely for reasons of economics, sentiment, and tradition.

Although as business men and women, we believe in and insist on obtaining facts through scientific research and investigation, as hospital administrators we are less consistent. We rarely estimate as separate items the actual cost of nursing service, the extra hours of work contributed by nurses, the service given by students in the school of nursing to the hospital, and the part which the nursing school contributes to medical education.

There are only a limited number of hospitals where figures are available on these categories or where it can be ascertained what is the direct cost of either nursing service or nursing education. More and better studies of individual hospital costs will be required before we can intelligently approach the community with facts for the financial support which it should be called upon to give for this department of hospital work and service.

We are living in an era of scientific studies. The day has passed when opinions or experience are accepted as sufficient data upon which to decide

controversial issues, to make new policies, or to gain philanthropic or public support for community activities.

In thinking of hospitals and the status of nursing we find an analogy in the present plight of governments. Each country is striving to meet its needs on its own terms and in its own peculiar way without consideration for the many international forces which inevitably must determine the wisdom and justice of each decision. Since hospitals represent the spokes in the great revolving wheel of nursing, what transpires at the periphery depends on how far each hospital in the wheel may insist on adherence to its own terms, or on how far it may be willing to make immediate sacrifices in the interest of the future good, both for the benefit of nursing and for the welfare of the community. The will to see strengthened by the will to do will ultimately bring its own reward.

Thirteenth Annual Conference—Hospital Association of Pennsylvania

THE PENNSYLVANIA hospital group will hold its annual conference at the Hotel William Penn in Pittsburgh on April 10, 11, and 12. The program that is to be presented at this meeting will attract the attendance of hospital people not only in Pennsylvania but from eastern Ohio, western New York, and West Virginia.

Among the important questions that will be discussed are "A Trustee's Perspective of Hospital Problems of Today" by Mr. Robert W. Smith; "The Hospital and the State" by Mrs. Alice Liveright; "The Hospital and the City" by Mr. Southard Hay; "Legislation as It Affects Hospitals" by Major Roger A. Greene; "Publicity and Public Relations" by Mr. M. H. Eichenlaub; "Professional Enthusiasm in the Hospital" by Dr. Irvin D. Metzger; "The Organization of Hospitals for Community Action" by Mr. Homer Wickenden; "Hospitals and Clinics in the Recovery Program" by Dr. Michael M. Davis; "Solicitation of Negligence Cases in Hospitals" by the Hon. Gifford K. Wright; "The Community-wide Survey of Philanthropic Agencies, Public and Private" by Mr. R. Templeton Smith; and "The American Hospital Association in Washington" by Dr. Bert W. Caldwell.

The annual dinner will be held on Tuesday evening, with the President of the Association, Miss Jessie J. Turnbull, presiding. The speaker will be Albert Kennedy Rowswell, on "The Value of a Laugh."

Two Round Table discussions will be conducted on Hospital Problems, one by Mr. John M. Smith and the other by Mr. Melvin L. Sutley. The meetings will be presided over by Miss Turnbull, by Sister Mary Rose, and by Miss Mary V. Stephenson.

Experience Reveals the Worth of Group Hospitalization

FRANK VAN DYK

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IN REVIEWING the first year's experience with group hospitalization in Essex County, New Jersey, one recognizes the truth of the quotation, "One example is worth a thousand arguments." Another simile which might be composed is, "A period of practical experience is worth many years of theoretical discussion."

In presenting this paper on the subject of group hospitalization I hope to be able to describe some actual examples of its worth which have been gleaned from the harvest of a full year of operation of such a plan in Essex County, New Jersey; also, to interpret this experience in relation to the following important factors:

(1) The proper concept of the principles of group hospitalization in the progress of community hospital service.
(2) Indication of its financial or actuarial soundness.
(3) Its importance or value to the community as well as the hospital.
(4) The need for proper organization, development, and methods of promotion.

1. There are many indications that we should consider group hospitalization or the periodic payment plan, or whatever we may choose to call it, in the broad community-wide sense, and not solely as a money-raising scheme for hospitals. Recently one of the hospital publications raised the question as to why hospitals generally have not more readily initiated such plans. Among other reasons, it is my impression that hospitals have considered such plans all too much as a panacea for all hospital financial ills resulting from this period of economic stress. And, because a little reflection indicated that no great returns could be immediately assured, action was deferred or the thought discarded.

Even in our most prosperous years there was ample evidence on every hand to the discerning student of hospital economics that some plan must be devised whereby the person of modest means could more easily meet the costs of the hospital care he needed. Consequently, we should not look upon group hospitalization merely as a device to meet the present crisis in hospital finance which no longer will be necessary when pros-

Read before the New England Hospital Association Conference, in Boston, February 16.

perity returns. It is undeniably true that this financial or business depression has greatly accelerated thought and action toward the recognition and adoption of the principle of insurance to hospitalization, but I hasten to remind you that the work of the study by the Committee on the Costs of Medical Care started in the years of our greatest prosperity. Obviously, then, the recognition of this principle in hospital work is a change which progress in community welfare service demands.

There are no grounds for a belief or any indication that such a change will evoke any regulatory powers of practice or policy which will interfere with the autonomy of the voluntary charitable hospital participating in a group hospitalization plan. There is no need to fear that the adoption of such plans will destroy what self-sacrificing individuals or boards, professional or lay, have achieved in raising our voluntary hospitals to their present high standards of human service. As long as we view, initiate, and develop such plans as a means of not only preserving our community hospital system but extending its service, no such danger is imminent. This implies, however, that group hospitalization plans adhere to certain fundamental principles as adopted by the American Hospital Association. Failure to recognize the wisdom and logic of those principles invites failure, as several instances already have proved.

One hears and reads a good deal of late regarding the advantages of developing community relationship by conducting programs which are designed to create better understanding and appreciation of hospitals. No one can deny the important benefits which such efforts can bring, but they still do not make it possible for the individual with a low income to pay his hospital bill without hardship.

All of us must agree that hospitals have an obligation to the community they serve to place their service within reach of all economic groups. As a matter of fact haven't hospitals always endeavored to meet this obligation by the establishment of charges on the basis of ability to pay, rather than cost? Haven't hospitals permitted people to believe that when they paid an established rate which was less than cost they were paying in full? In recent years we have endeavored to correct such a belief, but the knowledge that he isn't meeting the cost doesn't help the patient to find the means to make up the difference.

This obligation on the part of hospitals implies that they should at least take an active part in removing the handicap of cost charges which usually are beyond the means of many patients. It prevents many self-respecting persons, who want to pay their way, from seeking the benefits of hospital service. Unless hospitals act to improve this condition, I, for one, am afraid that the patient's appreciation of the hospital's services will be more or less minimized, particularly by the fact that he must make a payment

he can ill afford. Only very few want to accept charity in whole or in part. Hospitals can't go on indefinitely seeking aid from philanthropy and from sources of taxation at the same time. We must make it possible for people to meet the cost of their hospital care. Isn't this the principle involved in our country's recovery program? Hospitals might do well to fall in line insofar as their opportunities permit. Nothing can be more democratic, more coöperative, more neighborly, and more in keeping with the spirit of service than group hospitalization.

I bring up these points because they have been reflected in reactions obtained in our experience during the past year. Knowledge of the fact that the hospitals in Essex County adopted such a plan is creating a markedly favorable attitude toward the hospitals when its intent and purpose is fully understood. Not only is the Plan making people hospital-conscious, but it serves as an opportunity to emphasize the many advantages of their service. Think of the educational opportunities afforded by the presentation of the benefits of a private payment plan and by the regular contact with the subscribers through notices and receipts of their payments.

Nearly all of our participating hospitals receive support from the Community Chest. In recent annual campaigns there was no evidence whatsoever that payments to the Plan lessened the willingness to share in creating such funds. Many of the employed groups subscribing to our Plan also contribute regularly to the Chest.

If today there is an objection to the operation of the Hospital Service Plan in Essex County by the members of the local medical profession, they are indeed most inarticulate in voicing them. There is a growing number of instances where physicians have voiced their approval. This growing favorable reception of the Plan was more or less anticipated because every effort was made to avoid any features that would reflect unfavorably upon the doctor or in any way interfere with his individual relationship to his patient.

2. Now let us turn to our experience regarding incidence of hospitalization among subscribers and the financial phase of the Plan. In a study which was undertaken prior to the adoption of the Plan, 7% of the gainfully employed persons in Essex County were hospitalized during 1931. This proportion, however, included Workingmen's Compensation patients who are not entitled to benefits under our Plan. The average stay of this proportionate number of patients was practically 10 days. This proportion and average stay is equivalent to one hospital service day to every 17 member months. Member months is interpreted to mean, for example: if 1,000 subscribers remained in good standing for one year, the number of member months would be 1,000 times 12, or 12,000. Our actual experience during the first year was only one hospital day in every 25 mem-

ber months, or a percentage of 5.2% as compared with a minimum anticipation of 7%.

One must bear in mind, however, that only a few subscribers were enrolled during the first few months of the calendar year. As you know, the peak in hospital occupancy usually occurs during these months. Moreover, hospitalization generally has been unusually low during the past year. Since the first of this year the ratio is higher, but is still less than the minimum anticipated ratio of one hospital day for every 17 member months.

The impressive fact is that there is no indication whatsoever of a greater than normal or needed demand for hospital care. The average stay of subscribers who have been patients under the plan is 9.2 days—slightly less than the average stay revealed in the study referred to. Here again one finds no evidence that patients will remain in the hospital longer than usual because they do not face payment of a bill.

Another remarkable fact is that no tangible evidence has yet been discovered which reveals a single instance where a subscriber has sought the protection of the Plan because he or she was aware that hospital treatment was impending. There may have been such cases but neither the circumstances nor the medical history revealed such a situation. In presenting the merits of the Plan to the public with the purpose of obtaining applications, no rules regarding a definite proportion of subscribers from a given group were enforced. Neither did we avoid or discourage applications from female employees. The only rule rigidly adhered to was that the applicant must be gainfully employed and between the ages of 15 and 65 years. Not a single case seeking care under the Plan was disapproved, and not a single question was raised regarding the length of stay. In other words, subscribers were encouraged to obtain the full benefits of the Plan. The central office serves the subscribers not only as a source of information regarding the plan, but also as a source of advice and assistance in obtaining the hospital service (not medical) they may need.

In all probability the ratio or percentage of demand for service under the Plan will tend to increase as its benefits and privileges become more fully understood and appreciated, but there is nothing to indicate that this increase will reach beyond the margin of actuarial soundness. The percentages and ratios referred to above apply to the 5,017 applications received during the year.

The cost of operation during the year was equivalent to $1.53 per application. This cost, however, does not include expenditures which were obtained or met from other sources than the receipts from subscribers. The total cost approximates $2 per applicant. Please do not interpret this figure as a proportion of the receipts, because all of the 5,017 original

subscribers did not continue their participation in the Plan. I shall discuss the question of cancellations later in this paper.

Of course the finances of such a plan are wholly related with the number of subscribers and their demands for service. Since the incidence of demand was low, the financial status is consequently more favorable than was anticipated. As a matter of fact, it is so favorable that I shall not yield to the temptation to give you the figures because I am afraid they would prove misleading, and cause a wrong conception of the necessary rates and hospital payments. Participating hospitals have been paid a flat rate of $6 per day for all-inclusive service in semi-private accommodations. If the patient remained beyond the 21 days, hospitals received $2 for each additional day, which represents the one-third discount offered subscribers for charges incurred after the first 21 days.

3. It is of course obvious to everyone that the Plan has great advantages to the subscriber when he is in need of hospital care. In dollars and cents value, the subscribers who received benefits under the Plan during the first year saved, on an average, $56 each. This assumes that they would otherwise have paid rates equivalent to an average of $6 per day for nine and a fraction days. The average amount of their subscription payments up to the time they were admitted was $2.51.

Aside from the financial saving, it has been most apparent that subscribers are readily obtaining the care they need and avoiding delays which usually attend the fear or worry over expense. The best description I can offer of what the Plan is doing for subscribers is to quote excerpts from some of the letters received from patients who received service under the Plan, commenting upon the hospital service and the benefits they enjoyed. They are as follows:

> "Since my hospital experience, I have been sort of an unofficial salesman for the Plan, boosting it to my friends. I don't know of anything which is more practical or beneficial. It strikes me as odd that at the time of my enrollment hospitals were something far removed from my life, but since then I realize what a major part they play in American life. . . ."
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> "I especially appreciated the lack of embarrassment which attended my entrance in the hospital—no questions being asked about the method of payment. I had, of course, proper identification with me. I was agreeably surprised about this as I had anticipated otherwise. . . ."
>
> "The fact that I knew the hospital bill would be taken care of relieved my mind from worry and contributed in no small part to my rapid convalescence. . . ."
>
> "I was compelled to undergo quite a serious operation which, for the best results, required the care of my own special nurses and without the financial assistance I received under your Plan I would not

have afforded this care and my recovery would have been thus impaired. I consider it a very wonderful method of assisting those of us of moderate means to receive good care when we are ill. The very poor and the wealthy are provided for, but the middle financial group formerly had no provisions made for them."

"Please let me express our gratitude and appreciation to your organization for your service to my brother-in-law, who, since last July, and up to the time of his death last Monday, spent over five weeks in various hospitals in the county. Through the service of Associated Hospitals he saved well over $100 in hospital fees and this at a cash outlay of only 85 cents a month. We can recommend this service to anyone eligible and can assure them that they will receive courteous and generous treatment."

"It was indeed a great relief to me that I had joined your Hospital Plan. I can't say enough about how pleased and delighted I was with the care and the prompt attention I received. My doctor joins me in wishing you complete success and my coöperation in promoting your most useful Plan. . . ."

"I certainly feel that I was relieved of much financial worry at a time when I had plenty of other things to occupy my mind. I received excellent care and am entirely satisfied to continue as a subscriber to the Associated Hospitals of Essex County."

How can one help but be enthusiastic about the merits of group hospitalization when such comments are received almost daily? Is there any better way of creating good will and appreciation of the value of hospital service? I doubt it.

Insofar as the participating hospitals are concerned it is obvious that an income of $6 per day under our Plan not only approximates cost but is nearly twice the amount usually received from the class of patients subscribing to the Plan. It is true that care is given in semi-private accommodations, but who will dare to say that the cost of care in such accommodations is considerably higher than ward care?

The important factor is that the hospital is relieved of concern over the financial status of the patient and whether or not it will have difficulty in obtaining payment. As one superintendent says, "We can devote all our attention to the care of the patient and avoid asking questions which sometimes prove embarrassing." Under the Plan the financial barrier is removed and the hospital assumes its rightful position as a wholly humanitarian institution.

Upon discharge of the patient we ask the hospital to obtain his or her signature for the only purpose of acknowledging the service. The hospital forwards to the central office a receipted bill, which in turn is forwarded to the patient. This establishes a valuable contact because the patient is encouraged to comment on the service and the benefits received

under the Plan. Moreover, the receipted bill represents tangible evidence of the benefit and the fact that the hospital bill was paid.

When the patient prefers a private room a credit of $4 a day is allowed on the price of the room selected. The patient pays this difference to the hospital and the fund pays the hospital $6 a day. Consequently, when patients are cared for in private rooms the hospital receives a total income of at least $9 a day, assuming that the minimum private room rate is $7. This income is approximately the same as the usual income from private patients, including extras.

The hospital does assume a risk of loss in the event of a demand greater than was anticipated in establishing the Plan, but assuming the remote case of the income falling from $6 a day to $3 for example, the hospital still would be in no worse position than it was before the Plan. From every viewpoint the hospital's financial position is reasonably assured insofar as the Plan is concerned.

4. From the viewpoint of experience, the organization of a group hospitalization plan should include representation of the hospitals participating, the medical profession, and the community at large. Hospitals naturally should have the most prominent place since the operation of the Plan relates primarily to hospital administration. That the organization should be incorporated as one not for pecuniary profit is essential. It must be able to command the confidence of the public, particularly in that it is a community-wide movement and not one which is designated to benefit only hospitals.

Employees would be loath to give their necessary coöperation if assurances could not be given that the intent and purpose of the Plan is to benefit all concerned. There has been no objection to our Plan, for example, in that it does benefit the hospital. That is more or less to be expected, but there must be equal benefits to the subscriber. As the benefits through experience become more recognized, interest on the part of the employees, subscribers, and others is awakened regarding the organization behind the Plan, its financial security, or its ability to provide the benefits offered. We have already experienced several demands for adequate proof that Associated Hospitals of Essex County is a charitable organization, and that the benefits offered will always be available. The constitution and by-laws should include a definite agreement and understanding that the participating hospitals guarantee that the services offered will be provided. In other words, the hospitals must assume their full share of responsibility, otherwise there is a danger that confidence will be lacking and that the State Department of Banking and Insurance will step in and rule against the operation of the Plan.

In our first year we have been beset on every hand with requests and demands to extend the benefits to dependent members of the subscribers' families. There is every indication that the growth of the Plan will be retarded unless such provisions are made. In view of evidence that the rate of $10 is wholly adequate and perhaps too high, we must soon face the decision to extend the scope of our plan. If the hospitals are adequately paid and a surplus continues to increase, there will be no reason why it should not be done. In some places where plans are in operation benefits in the form of discounts on hospital bills incurred by members of the subscribers' families are included. This appears to be a wise provision as well as a necessary one. We are now studying this problem and in all probability will soon adopt such a policy. Our experience indicates many grounds for the belief that either the rate eventually must be reduced or the benefits increased. Providing benefits to family members on some proportionate basis, while keeping the present rate as it is, appears as a logical answer to this need. As more experience is gained other developments undoubtedly will be desirable. We can't expect to solve all the problems at the outset, but it is important that we begin now and develop in accordance with the needs revealed by experience.

The greatest problem encountered in the development of group hospitalization relates to the method and policy of promotion. A mere presentation of the benefits listed and emphasis on the low cost will not meet the situation. A demand based on a realization of the value of hospital service, its frequency, and how this plan meets a community and individual need must be created before applications can successfully be solicited. This requires training, experience, and knowledge of the complex problems of hospital operation and public relationship. Sales and organization experience are valuable assets, but alone they do not meet the need of an adequate and complete presentation of the merits of this plan. On the other hand knowledge of hospital affairs alone does not represent an ability to successfully secure applications.

In hospital circles, when the merits of this Plan are discussed, little concern seems to be expressed regarding the readiness of people to subscribe. One gains the impression that all that is necessary is to put such a plan in operation and that the line of applicants will form on the right. This is not the case. Even 85 cents a month will buy many loaves of bread for the man with the small income. He must be convinced that he needs this protection and more particularly that he realizes what modern hospital service offers in prevention as well as cure.

There is still an all too prevalent idea that hospitals are only for a patient with a serious illness or injury. The presentation of the merits of the Plan offers an opportunity to correct such an erroneous impression. This

is the real reason why, in my opinion, persons not adequately familiar with hospital service cannot interpret the real benefits of the Plan. I refer, of course, to the early effort in bringing the Plan before the public. After its benefits and merits become more generally known it is conceivable that persons not so well trained in hospital affairs could be successfully engaged in soliciting applications. Not only is this my opinion, but it has been proved by experience.

In the first few months of operation we assigned the work of promotion to several men who were not well versed in hospital matters. After a few months their services were discontinued but we are still paying the penalty of that mistake. One example will prove the point. A concern with 150 employees was approached early last year, and a presentation of the Plan was made before 12 department heads for the purpose of acquainting them with its merits so that their coöperation could be secured in obtaining a presentation before the employees under their leadership. The reaction was so unfavorable that no further progress could be made, despite repeated attempts, until a few weeks ago. At that time the intent and purpose of the Plan were fully and adequately explained to the employer, with the result that 125 employees were enrolled.

Much of the initial work was wasted because it has been found necessary to seek another opportunity to present and describe this protection against hospital costs. Because of the inadequate presentation many cancellations resulted. At the present time the percentage of cancellations approximates 10%. All of this experience has indicated the need for a carefully prepared plan of campaign.

An educational program should be undertaken and endorsement of recognized social and welfare bodies obtained. In other words, demand must be created. Naturally, the satisfied customer is the best salesman. No day goes by that we do not receive requests for information regarding the method of application which come from recommendations of subscribers who have received benefits. No mail arrives but what contains payments, applications, or requests for information. Interest is being aroused on every hand and we are experiencing the thrill of a growing response, and appreciation of our effort.

Yes, the adoption of group hospitalization involves problems of organization, operation, and promotion, but the satisfaction of meeting a real community need by removing from hospital service the burden of expense is worth the effort. We recommend that you join the growing ranks of hospitals adopting such plans so that you may do your part in extending the scope and service of hospitals to the sick and injured everywhere.

Plant Maintenance[1]

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IT IS NOT the purpose of this paper to encroach upon the field already so well covered by committees of the American Hospital Association and other bodies, on building construction, equipment, and maintenance. Under the leadership of such men as Dr. Goldwater, Dr. Howland, Dr. Munger, and others who have so ably served as chairmen, suggestions have come from these groups based upon their rich experience which have wisely served as yardsticks of sound measurement. These, when consistently and wisely followed, could not have failed to produce well built and properly planned hospitals.

No paper would represent any worthwhile thought if it failed to stress the tremendously important relationship between proper planning and sound construction, and future economy of maintenance. Of what avail is it if brass or copper pipe be used instead of iron in plumbing, if the interest in esthetic construction has caused these pipes to be concealed in walls so that whenever a leak occurs, it is necessary to tear out costly plaster and tile to get at them, followed by the expense of restoration? Of what value is a beautifully finished corridor or room if the absence of proper wainscoting, possible chair rail, or properly sloped bases results in scarring and disfigurement from contact with furniture, beds, stretchers, etc.? How could there have been sufficient consideration and proper emphasis placed on maintenance economy during the period of planning, if there was an installation of inferior flooring not calculated to withstand the wear and tear of hospital traffic? How wise is the plan which attempts to produce economies on the first cost in connection with the installation of elevators and other expensive equipment but results in the need for constant repair and other objectionable by-products? How practical and economical is the electrical installation in which large corridors and other units may be lighted by only one switch? Has sufficient consideration been given to the economy of heating, cleaning, painting, and other maintenance services in the building of corridors architecturally beautiful but wider and longer than the actual utilitarian need? What foresight has been exercised in the failure to protect corners, doorways, and other parts of the hospital against damages caused by stretchers, beds, trucks, and other furniture? Is sufficient consideration being given in the planning of hospitals to the subject of generation of electricity from otherwise wasted surplus steam? One could go on and give many other illustrations

[1]Read before the New England Hospital Association, Boston, February 17, 1934.

of the relationship between proper planning and low maintenance cost and, conversely, improper planning and high maintenance cost.

It requires no unusual imagination or great wisdom to appreciate the economic advantages enjoyed by the hospital superintendent fortunate enough to be given a plant well planned and well built with adequate but not superfluous space, planned on the principle of the patient's comfort, acoustically treated with provisions for proper and not wasteful lighting, equipped with a good heating plant, piping, and plumbing readily accessible to those charged with its upkeep. I deem it important and of great significance to stress these facts in defense of the large group of hospital administrators not so fortunate, who are functioning at a disadvantage either in old, obsolete plants or, in the instance of new institutions, in buildings planned for architectural beauty first, in order to satisfy the vanity of some generous benefactor. We find too often in the instance of old institutions that the superintendent is expected to administer, not only efficiently but extremely economically, plants with faulty and practically obsolete equipment. Hospital superintendents are not miracle men, but rather human beings, varying, as in other walks of human endeavor, in efficiency but, taken as a whole, conscientiously striving to meet the problems of efficient management expected at low cost.

It is pertinent to suggest for the kindly consideration of hospital consultants and architects, that simplicity consistent with the functional needs of the institution be adhered to, and that in the planning and construction of hospitals, every effort be made to so build or reconstruct them that the patient will be assured of a quiet, clean, and wholesome atmosphere, and that every effort be made to realize this objective without the unnecessary sacrifice of economy.

We should emphasize the need for careful planning of heating systems with separate lines for sterilization, laundry, and kitchen equipment and heating. This makes it possible to regulate for necessary heat on the one hand and for the high pressure steam demanded on the other. We found it wise at the Beth Israel Hospital, after several years of functioning, to install a modest generating plant, which is saving us over $6,000 a year in bills for electricity. Economy can be promoted in placing pipes in pipe shafts or even exposed if necessary and readily accessible to our maintenance crew. This is particularly important in the instance of brine pipes with their limited life, which are very costly to replace when concealed.

Laundry chutes in nurses' homes and out-patient departments are as important as in main hospitals in saving on unnecessary trucking. These are but a few suggestions in connection with structural planning. We are familiar with the lengthy but exceedingly valuable suggestions in connection with hospital planning.

The proper organization of the maintenance department and the assembling of a reasonably efficient maintenance group can result in substantial saving to the average hospital of 200 beds. It is quite agreed that the responsibility for heating, lighting, and maintenance be vested in one individual who is in charge of the maintenance personnel, which for the unit of the above size should include usually a plumber, steamfitter, carpenter, painter, painter's helper, as well as the personnel concerned with heating and lighting. In our instance, as is quite the prevalent custom, the maintenance engineer is in charge of our ambulance, truck, and elevators, as well as the gardener and other personnel maintaining the grounds. We are conforming in practically every respect with the concept of organization set down in what I consider an excellent paper on maintenance appearing in the current issue of the *Modern Hospital*.

I will not attempt to outline the specific duties of every one of this varied personnel, since their responsibilities are as familiar to you as they are to me. What I would dare to emphasize is the application of the maxim of "a stitch in time saves nine." Good supervision, constant watchfulness, prompt repair, and necessary replacement are the key-notes to maintenance of economy. Encouraging requisitions for *necessary* repairs, stimulating the nursing service and others to exercise "eternal vigilance," expecting of the maintenance engineer frequent rounds and the performance of immediate repairs is conducive to satisfactory end results. "Do it yourself" implies that every effort will be made to make every possible repair and construction without the aid of outsiders.

We found it advisable to build a well equipped maintenance shop, erected in accordance with the best standards of factory construction. We find it, as all hospitals will, economic and sound to have our maintenance personnel directed by an efficient, licensed engineer with a keenness for constantly ferreting out new methods for the reduction of maintenance, heating, and lighting costs. This person may well be called the maintenance engineer or building superintendent, and as such in our instance is not only in charge of heating, lighting, and what is ordinarily termed maintenance, but as explained later is assuming the additional responsibilities usually vested in a housekeeper.

In the upkeep of plumbing, of steam lines, sterilizers and laundry equipment, we emphasize the advantage of periodic inspection at least bi-monthly if possible. In our instance, we do it at least once weekly. Tightening a leaky joint, reseating a valve, or replacing a gasket will save dollars if done before the defect has resulted in damage to surrounding property. With regard to the care of furniture and other mobile equipment, the Beth Israel Hospital has a surplus of at least 5% in the case of items ordinarily used so that at all times in the event that a piece of equipment is broken,

it can be replaced without delay by a similar piece which is sent up from our shops. In this way, a rotation is maintained with an adequate reserve on hand to meet emergencies. Our equipment is painted a color distinctive of the department to which it belongs. For example: our private room furniture is uniformly walnut, our ward furniture cream, and our surgical equipment gray. By this device, misplaced equipment is at once detected and inventories can be taken with greater ease. Further, having furniture of the same color leads to greater flexibility in moving equipment from one room to another as in the case of hospital beds where a patient can be transferred from a room at one price to a room at another price without creating a clash in contrast due to the color of the bed not harmonizing with the color of the furniture of the room. In the same way drapes, rugs, and spreads can be standardized with obvious advantage.

With regard to the general upkeep of the hospital: our policy has been to paint and repair as the need occurs rather than wait for a suitable season of the year to shut down a whole floor at a time. In this way the hospital is always kept in what we believe is good appearance, while the loss of any possible income due to shutting down a whole unit is prevented.

It was pointed out to me that this group might be particularly interested in an innovation in our organization at the Beth Israel Hospital which has resulted in the elimination of the housekeeper and the division of her former responsibilities by placing them under other existing department heads. Prior to this change, our organization was in accord with the general practice of placing with the housekeeper the responsibility for general cleanliness, washing the floors, walls, and windows, the upkeep of linens, the sewing room, and the management of the laundry.

The change consisted in placing the ward maids under the supervision of the department of nursing as is frequently done in other hospitals, and the placing of the housemen and the sewing room under the maintenance department and the creation of a separate department of laundry and linens in accordance with the newer practice in some large institutions. On the whole, we have found this change to have rendered certain distinct benefits and to have improved the general appearance of the hospital. When the ward maids were under the housekeeper, there was always the question of a certain amount of division of authority. When the maid was charged with the responsibility for cleaning a ward or a room, she was always exposed to the possible criticism and complaint of the nurse in charge as to certain deficiencies. Under the present arrangement, the head nurse is held responsible for the cleanliness of the ward, and the maid is under her direction. The head nurse in this way can justly be held responsible for cleanliness and cannot continue to shift the blame.

The reason for placing the housemen under the department of maintenance is dual: in the first place, the chief of the maintenance department must of necessity be experienced in dealing with men and in obtaining from them a maximum amount of efficient work. The change has resulted in the reduction of the number of our housemen and in a saving of several thousands of dollars annually, while the hospital is cleaner than formerly.

The other reason, which will appear very logical, is that since the chief of maintenance is held responsible for cleaning and repairs, if the man intrusted with polishing floors has abused his machine, it will at once come to the attention of the executive who is intrusted with keeping the machine in repair. If an elevator operator through improper handling makes frequent repairs necessary to a car, the maintenance chief will see to it that the person is properly instructed so that it may not happen again. If when a room is vacated by a patient, the maintenance man must clean it for the reception of another patient, it is more efficient for the men responsible for the cleaning at the same time to take note of any repairs which are necessary and make them at once without the usual delay. Not only is the waxing of the floor attended to, but also the leaky faucet is tightened, the windows are cleaned, and the spot on the wall where the paint had been chipped off by a careless visitor is touched up, without the burdensome transmission of requisitions from department to department with the waste of time which usually occurs. Thus the maintenance superintendent in making daily rounds through the building is in an excellent position to keep an eye not only on the general state of repair of the hospital but also on its cleanliness. Through his knowledge of damage done by improper cleaning materials, he can insist that the cleaners use detergents which will clean but not destroy painted surfaces or flooring. By training the various housemen to be specialists in each type of cleaning, such as waxing floors, washing paint, cleaning windows, etc., greater efficiency is obtained in the quality and quantity of the work done, and likewise a conservation in the amount of materials used. The one possible objection to this plan in our experience has been the fact that however efficient from an economic viewpoint the change has been, the critical eye might observe a lack of the feminine touch in the disposition of window drapes, rugs, chair covers, and furniture. With this thought in mind, a woman assistant has been placed under the maintenance chief whose responsibility is to see to it that theoretically the gracious quality so ably exemplified by women be applied, to the end that the appearance of our private rooms, waiting rooms, and wards may be pleasing. In reality her job is the responsibility for sewing and mending curtains, drapes, chair covers, and those other things for which a woman may appear better suited.

In this arrangement where she is under the maintenance engineer or plant superintendent, there is an avoidance of those objections which we have attempted to enumerate and on the other hand, the availability of someone to fill those gaps which it is presumed a woman can fill so well.

It is important to summarize what we believe are some of the advantages of concentrating under one person heating, lighting, and the so-called maintenance responsibilities and duties in connection with housekeeping.

It reduces duplication and eliminates a certain amount of friction.

A man can get much better results out of housemen.

Absence of double supervision over ward and floor maids.

Repairs more easily controlled by the fact that the maintenance department is responsible for both the performance of the work and the diminution of repairs to a minimum made necessary through faulty use.

The maintenance man in his daily rounds will have an opportunity more quickly to be informed directly by a man of his own department that the vacuum cleaner or the floor polisher needs attention. Under the housekeeping system, he would report it to his housekeeper, and she in turn would have to report it through some form of requisition or other set-up to the maintenance department.

It is reasonable to say that it results in a more expeditious solution of housekeeping and maintenance problems.

It is well brought out in the report of the Committee on Hospital Planning and Equipment of the American Hospital Association that "a hospital should be built so that it will be kept clean easily and economically." Maintenance is one of the most important and expensive functions in connection with hospital management. Adequate storage space, facilities for scrubbing machines, floor polishers, disposal of waste, shelving, proper walls, and other items play their part in the economic maintenance of a clean hospital. I believe that it is for the best interest of the patient and all concerned to concentrate the responsibility in the allied field of maintenance and housekeeping, heating, lighting, etc., to as few individuals as possible. This led us to experiment in the way that we have. We are saving money, believe our hospital is clean—as clean as before if not more so. There is, of course, no hard and fast rule which would make us presume that this plan can function successfully in every instance. The question of personality and ability of the person charged with this total responsibility is of exceeding importance and must be in a marked measure a deciding factor. Given, however, a reasonable maintenance superintendent, I believe it wise to place the whole responsibility in one individual's hands and give him a woman assistant for these things which some believe is only a woman's job. Our experience is a cleaner hospital and less repairs.

Discussion

Norman C. Baker, M.D.
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I heartily agree with Dr. Wilinsky that the subject of plant maintenance has already been covered in voluminous reports of many committees by men who have made long and earnest study of the subject. There is no doubt that, in hospitals built in the last few years, the administrators have insisted that buildings be so constructed that future maintenance could be carried on with as little expense and trouble as possible. It is safe to say, however, that no matter how carefully plans are made, after the building is up and occupied for only a short time the weak spots begin to become evident and the necessity of repairs and replacements is forced upon us.

Proper planning and sound construction are beautiful words and are on the tip of the tongue of every interested person connected with the hospital administration from the time the preliminary pencil drawings are submitted by the architect to the time the last bit of mortar and lime is pushed out of the back door, as the first patient enters the front door. (I am sure that you have all had experience in trying to occupy a new hospital building.)

It is my good fortune to be connected with a hospital in which the director has an opportunity for a varied and diversified experience in plant maintenance. This calls for fine judgment as to just where to begin, how to proceed, and when and where to stop. It connects the construction of the dim and distant past with that of the present.

I believe that Dr. Wilinsky's innovation of elimination of a housekeeper will be successful as long as he has the same engineer as he has now, for he has evidently tried him out and has found him to be a person who is peculiarly suited for such responsibilities.

I also know that Dr. Wilinsky's hospital is new and modern. He enjoys the economic advantage of being a hospital superintendent who has been fortunate enough to be given a plant well built and well planned. This advantage is reflected in the duties of his engineer, who, no doubt, has time to attend to details which would be impossible in other institutions with a different set-up or combination of buildings. From my experience, however, I would be doubtful of the efficacy of this plan as a lasting institution. The tendency of the day is to take housekeeping duties away from the nursing department in order that the nurses may devote their energies to the care of the patients.

Dr. Wilinsky has covered the general principles of maintenance of plant and has spoken of the advantages of hospital directors who are in charge of modern, newly constructed buildings. It may be of interest to you if I speak of defects that I have noted in construction of modern buildings and defects in older buildings due to wear and tear of time and the elements over a period of perhaps 15 or more years.

Brick, with various kinds of stone trim, forms the modern material for construction. Even brick and limestone walls do leak when a driving wind and rain continue for several days, and moisture is driven through

the walls and saturates the plaster on the inside, causing it to crumble and fall off. In cold weather with freezing temperature and moist walls, the expansion loosens the brick and mortar, and relaying or repointing becomes necessary. Leaky brick walls may be made tight by spraying them with a preparation of hot wax. This should be done during July and August so that the wax will penetrate the porous bricks when they are moderately warm. Such a condition is, of course, due to faulty construction and is usually caused by a wall that is not thick enough, with little or no furring on the inside, leaving too little air space between the outside wall and inside plaster.

When limestone trim is used on a building and forms a beltline around the building, or when it is used to form the cornice, there is sure to be a leak sooner or later at the point where two pieces of stone butt together, due to erosion of the mortar. This erosion leaves a crevice which allows the water to gradually work into the wall and cause serious damage to the masonry; therefore, the exterior of all buildings of brick and stone should be carefully scrutinized for places where mortar is loose and repointing is necessary. Here again, the condition is due to mortar which is improperly mixed; or it may be caused by freezing weather during construction of the building. Cast-stone and sand-stone window sills and stone capping on parapets or brick walls are porous and, unless special attention is given during construction, allow water to work down into the walls and loosen the brick and mortar. When such a condition occurs in buildings of older construction, it is necessary to remove the stone and place it in a copper pan or flash the top of the wall with lead or copper.

Painting

In recent years the custom of using high-gloss enamel paint for inside work has become more popular. It will stand washing many times, and looks and wears much better than the old-time hospital painter's lead and oil—weighed, measured, and mixed by hand in the hospital paint shop. Modern chemistry and machinery produce a much better and more durable paint, saving much time for the boss painter, who used to be the boss because he knew how to mix paint. There are several preparations of damp-proofing material which can be applied as a sub-coat on walls which are located in damp areas.

For ceilings, kalsomine seems to be the most satisfactory; it is easily removed and quickly applied.

It is often necessary to paint wards while they are occupied by patients. This should be done during the summer months. With the absence of turpentine smell in modern paint, we seldom have complaints from patients.

For outside work, lead and oil is the most satisfactory.

Floors

Maintenance of floors in hospitals is one of the most difficult problems of a hospital director, and when it is necessary to replace or recover a floor, careful consideration should be given as to the type and material selected.

At the Massachusetts General Hospital, I believe we have had an opportunity to try out about every kind of flooring on the market. We have wood floors, cement floors, tile floors (of large, small, and medium

tile), ceramic tile, quarry tile, slate tile, and tile that was put into the Old Bulfinch Building when it was first constructed. We also have rubber, linoleum, asphalt, terrazzo, cork, and cork carpet.

I will mention briefly where some of these floors may be used, and methods followed in maintenance.

Floor Maintenance

In many hospitals the original wood floors are still in use. These require occasional washing and frequent waxing. At the Massachusetts General Hospital practically all wax is made in the pharmacy.

Terrazzo and quarry tile floors used in operating rooms, corridors, utility rooms, and kitchens can be washed either with ordinary yellow bar soap, or with soft soap made at the hospital. This leaves a glossy surface which is not slippery. When they are scrubbed with abrasive material, it is sometimes necessary to polish with wax and a mechanical waxing machine.

Rubber floors shuold be washed with a neutral soap. They can then be polished with water wax. This wax is inexpensive and can be purchased in jelly form and mixed in the right proportion by the pharmacists; and, when applied and polished, leaves a surface that is glossy and not slippery and from which spots can be cleaned without marring the floor.

Cork carpet.—This is a soft, non-slippery floor that may be used on ramps and other surfaces where a non-slip covering is most essential. It comes in long strips like linoleum and is soft and pliable under foot, is never slippery and has good wearing qualities. It requires very little maintenance—simply occasional washing.

Cork tile.—This flooring is a tile made of pressed ground cork and is pliable and, in certain locations, an ideal type. It can be used in offices, libraries, and other locations where traffic is not too heavy and can be laid on a substantial, even, wood floor or on cement or concrete. It is cemented down, sanded, and three coats of shellac applied, after which it is waxed when necessary. It is a sound-deadening floor.

Asphalt tile flooring.—There are several types of this flooring on the market. It comes about ⅛ inch thick and may be used to cover old wooden floors, making them look like newly installed floors. It has fine wearing qualities and is satisfactory. The old floor is covered with a fine wire mesh into which a plastic material is worked and troweled smooth and allowed to harden. The new tile is then cemented directly to this smooth surface. This type of flooring is also useful in basement rooms where there may be some dampness. It is put down with waterproof cement and is durable.

Linoleum floors.—Linoleum is still used to a considerable extent. It would seem to me that experience has taught us that the ¼-inch battleship linoleum is too thick for general use. The chief trouble is that it pits easily, becomes rough where furniture is allowed to remain in the same location for any length of time, and requires considerable care. I believe that inlaid or solid color linoleum, approximately 3/16 inch (to ⅛ inch) thick, is more satisfactory. This can be laid on a wooden floor, provided that the floor boards are tight and that cracks are not prominent. If boards are loose, they should be renailed and cracks filled with crack-filler, the surface sanded and made smooth, and felt paper laid and cemented to the floor before the linoleum is laid. In general, linoleum floors are not

satisfactory in basements where there is moisture or where water may collect when there is an unexpected flood.

Concrete or cement floors, when properly laid, are troweled to a smooth finish and are ideal floors for basements, laid in sections of from 4 to 6 feet square. Basement floors of cement or concrete when laid directly on filled land should be heavily reinforced with steel; this is called a floated floor. The better way is to hang the floor to the foundation walls by reinforced concrete beams; this is known as a suspended or framed floor. They may be colored; black or a dark color is the most satisfactory. Concrete floors are porous and, when laid in kitchens, refrigerators, laboratories, utility rooms, or toilets, absorb water and grease. To prevent absorption, they can be filled with a preparation of beeswax, turpentine, and linseed oil made by the pharmacist. This may be applied hot and allowed to dry, then polished. (Hot floor wax: 5 pounds Parowax, 1 gallon turpentine, 1 quart raw linseed oil. Apply hot. If floors are smooth, thin with turpentine.) A cement floor in corridors with cork carpet runners is very satisfactory.

Quarry tile is probably the best type of flooring for kitchens, refrigerators, operating rooms, utility rooms, and toilets, as it is almost everlasting, easy to keep clean, and not affected by abrasive material. Other types of flooring to be considered are marble, slate, and fine grain limestone. Of these, slate is harder and more durable. In general, large size tile is more satisfactory than the small tile.

Replacement of stair treads.—Stair treads should be of steel or iron and have carborundum surfaces.

Ventilating Systems

Old ventilating systems are often complicated and sooner or later found inadequate and have to be replaced. Indirect systems with fresh air from the outside through ducts, drawn over steam radiators into a room or ward, either by gravity flow or by use of fans, are expensive to install and to maintain. Fans and motors wear out, ducts become full of dust. Conditioned air is now receiving much attention, but it appears to be too complicated for practical use, unless it is confined to single rooms or a small suite of rooms. Direct radiation with exposed radiators in rooms, which may be regulated by automatic valves or by hand valves are better. Great care must be taken in steam line returns to see that there are no pockets to collect condensed water and cause cracking of radiators and pounding in the larger lines. Vacuum pumps and steam traps must be in working order at all times to insure economical heating.

Laundry Equipment

Replacements.—When replacing laundry equipment, a careful study should be made of the newer models of presses, drying tumblers, extractors, and flat work ironers. (Stainless steel or Monel metal washers are satisfactory and economical.) There are presses on the market today which can do much of the work that was formerly done by hand ironers. Within two years we have installed a press, using one operator, who does the work formerly done by three hand ironers. A large nine-pocket metal washer can do the bulk of sheets, pillow cases, blankets, towels, shirts, and

general laundry, while smaller machines are necessary for finer work where special care is desired. Laundry chutes for soiled linen should be conveniently placed. Laundry trucks and baskets should be equipped with good casters. Bib and collar ironers, starching machines, hot air dry rooms, are necessary items of equipment in the larger hospitals.

Refrigeration

Maintenance of refrigerators is a very important factor in hospital operation. Central plants are necessary for the manufacture of ice and cooling of large refrigerators in the main store. There should be no direct gas expansion pipes in any area or building occupied by patients. Brine should be pumped to refrigerators located in such places.

In ward kitchens unit refrigeration should be installed. Electric equipment, air conditioner type, is best for large walk-in boxes.

Engine Room

Maintenance of the boiler plant is very important. Savings of thousands of dollars annually can be made by proper plant operation. Automatic damper control, regulated automatically by atmospheric changes, can be installed in the chimney. A careful check on flue gases by means of CO_2 registers and analyzers should be made. The temperature and pressure of the oil and size of the outlet in burner tips are important. All steam except exhaust steam from a steam engine, which is sure to contain oil, should be returned to the boiler room in the form of hot condensed water. From the hot water tank it is again pumped into the boilers and saves much oil. An economizer in the main boiler flues is practical. A check on boiler operation in the form of daily report from the fireman and engineer is often helpful. Frequent inspection of boilers and engines is necessary. A survey of the heating plant by an expert engineer, with a written report of conditions, is helpful and a protection for the administrator.

The Maintenance, Inspection, and Testing of Fire Alarm Systems, Extinguishers, and Fire-fighting Apparatus Is Essential

Pressure sprinkler systems should be installed in such a manner that various lines can be tested frequently. Such a system should also show a signal when a sprinkler head goes off. At the Massachusetts General Hospital a light shows and a signal bell rings in the central telephone office, and information of trouble is quickly sent throughout the hospital. The sprinkler lines are tested monthly by a representative of the Boston Board of Fire Underwriters. A carbon tetrachloride solution may be used in lines that are exposed to freezing temperatures, or, better still under such conditions, a dry pipe system can be used. This method consists of filling the pipes with air under sufficient pressure to hold; a valve closed against the water pressure from the main supply. When a sprinkler head goes off, air pressure is released, the valve opens, and water rushes through the pipes. Extinguishers charged with liquid CO_2 seem to be somewhat more efficient in fires due to oil, gasoline, fat, or grease. CO_2 gas does no damage to any material with which it comes in contact. Extinguishers of certain types should be recharged annually. Cotton and rubber hose should be examined and tested at reasonable intervals.

The necessity of practicing rigid economy is obvious. This may be reflected in cost of maintenance of plant, providing that essential and obvious replacements and repairs are made. Expenditures for non-essentials should be stopped. Expensive methods of furnishing and maintenance of plant should be curtailed.

Miss Eldredge Retires as Director of Nursing Education in Wisconsin

A pioneer in nursing education, Miss Adda Eldredge, R.N., will retire as director of the Bureau of Nursing Education for the state of Wisconsin, effective May 1.

Few persons interested in the development of nursing education in this country have contributed more to the academic and practical standards which have directed the education and the training of the nurse, for the past decade or more, than Miss Eldredge. Those in the medical profession as well as in the hospital field who have been associated with her have long appreciated her ability and worth. Through her diplomacy and tact, and her sound understanding of the principles she advocated, she reconciled any differences of policy or of opinion that may at any time have existed, and has succeeded in placing nursing education and nursing training in Wisconsin on a par with that of any other state. She has enjoyed universally the respect of the physician, the hospital administrator, and her associates in the nursing field.

Miss Eldredge received her nurse training at St. Luke's Hospital, Chicago, during the period when so many of today's outstanding members of the nursing profession received their training. She was early recognized a leader in her profession and continued her interest in nursing education through postgraduate work at colleges and universities, including Teachers College at Columbia.

She has held many important positions in the American Nurses' Association, having served as member and chairman of many of its important committees, as interstate secretary for the A. N. A., and was twice elected president of that Association.

Miss Eldredge was a leader in her field. She had vision to see the rapid progress which nursing education would make and the ability to make her contribution to that progress in the best possible way, so as to achieve the greatest possible good for the largest number of the members of her profession. Her accomplishments as director of the Bureau of Nursing Education of Wisconsin have been recognized by the nursing profession in all countries.

When she resigns her directorship on May 1 she will leave a system of nursing education in the state of Wisconsin that will prove a model for similar systems in other states.

The Hospital Superintendent Looks at Occupational Therapy

PAUL KELLER, M.D.

Executive Director, Newark Beth Israel Hospital, Newark, New Jersey

AS A HOSPITAL EXECUTIVE directing a large general hospital, I welcome the opportunity you have so kindly given me to appear before your organization and to participate in this conference. Looking back over the historical development of your profession I was greatly impressed by the fact that it first came into prominence in that difficult period immediately following the World War, and that it received its greatest inspiration and impetus from that post-war era. Surely there is no purpose in my recounting to you, now, how those who were interested in the returned, wounded soldiers in military and reconstruction hospitals, both in this country and abroad, were challenged by the psychological, the recreational, the vocational, the educational, and the occupational needs of those disabled men, and how they devised ways and means to meet these needs, and how the activities they instituted were broken down into a series of motions and exercises, each of which could be evaluated from a therapeutic standpoint and thus related to the individual's disability and the corrective treatment he required.

The thought that impresses itself on me with terrific force is the fact that we are once again going through a world crisis, albeit different from the former one, and the human wrecks it is leaving in its wake are once again challenging our best minds to invent ways of meeting their needs—needs in themselves not new, but new in their manifestations, and new in that they are present in overwhelming numbers. It strikes me that the present crisis, which in some ways has been as devastating as the World War, should logically produce the second great stimulus to occupational therapy, particularly where the general hospital is concerned. It appears to me that the stage is set for you and that if you will but marshal your forces and capitalize the situation, you will be able to establish yourselves firmly in the general hospitals throughout the country. That is the thing I want to discuss with you today. What kind of institution is the general hospital of 1934? What are some of the forces at work within it? What part does it play in the life of the community? How does occupational therapy fit into the picture?

Read before the Tri-State Occupational Therapy Association, Philadelphia, January 8, 1934.

The general hospital of 1934 is a very different institution from the hospital of 1900 or even that of 1920. While it is not necessary, for the purposes of this paper, to discuss this in great detail, I want to point out to you some of the more pertinent trends, together with their significance for occupational therapy.

With the high degree of specialization that has obtained in the field of medical practice within the past few decades, the hospital patient has become little more than the sum-total of a number of different physiological systems, the particular systems that characterized any given individual depending entirely on the location of his complaints. The patient as a personality did not exist.

Within our own time, however, there has gradually seeped through this mechanized way of looking at things a realization that the patient, as a personality, is something to be reckoned with, that he can advance or impede the work of the physician, that he can materially help or retard his recovery, that he can be either a functioning, coöperative individual or just a receptacle for medication. In short, the physician is learning to regard the patient as a partner in his own cure and to realize the importance of securing his interest and assistance in the treatment processes. Just to approach the patient with a pleasant bedside manner is not sufficient to win him over. Removed from his normal way of life, placed in a strange building, in a strange bed, in a strange room, in the midst of strange people, and under a strange routine the patient becomes bewildered. Deprived of his usual activity, he loses all sense of time and is likely to spend far too many hours in unhealthy introspection. The result is discouragement, depression, feelings of inferiority and inadequacy, and mental sluggishness—no one of which, I am sure you will agree, make for quick recovery.

Here, it seems to me, is an opportunity for the occupational therapist who is alert to the possibilities of her job, aside from its purely therapeutic function. If she can get the patient to attempt some simple activity, she can gradually catch his interest and awaken his enthusiasm. A patient whose hands are kept busy will have his mind occupied. If he can work for only a few moments at a time, he develops a new lease on life and a new interest in getting well. The experience of creating something with his own hands gives him a new valuation of his own worth. Except for the limitations imposed by his physical condition, he thus retains, as far as possible, his usual mental habits, attitudes, and outlook.

But here, again, is another task for the therapist, and one that is equally as hard. If she is to win over the patient, she must have as her ally the attending physician. She must win his confidence and his coöperation. For the most part, the medical staffs in our general hospitals know little of the value of occupational therapy, and the average physician, through

his inexperience with this field, has relatively little interest in the subject. However, this much is certain: if occupational therapy is to have any significance in the general hospital, it must win and hold the respect and the coöperation of the medical practitioner. He must be willing to assume an important rôle. He must be urged to see the necessity of requesting occupational activity for his patient on a prescription basis and of insisting on a high standard of clinical recording and progress notes. Thus, occupational therapy comes to the patient at the order of his doctor, but it is the therapist herself who must, at first at least, call the doctor's attention to the need, hold his interest through consultations and conferences, and finally secure his whole-hearted participation through reviews of successful results.

But even before the hospital physician, comes the hospital administrator. He, too, is for the most part uninformed of the place of occupational therapy in the hospital scheme. The exceptions, of course, are the administrators of the institutions for the mentally sick. They have long since recognized this work as an important factor in the treatment of mental patients. In my own state of New Jersey, for instance, the large public hospitals for mental and nervous diseases, both state and county, have highly developed departments of occupational therapy and have in many instances erected special buildings for this purpose. The private sanatoria too have their therapists. And the public institutions for the treatment of the tuberculous, where the need is equally obvious, likewise make occupational therapy an important part of their programs. But not so in the general acute hospitals.

If you were to approach the average hospital administrator today with a request for an occupational therapy department, his probable response would be, "Not now. The depression has put an end to hospital frills. Our money must be conserved for essentials." I am sure you will not disagree with me when I say that I refuse to classify occupational therapy as a hospital frill, and when I maintain that just because of the depression, just because there is a shortage of funds, the hospital administrator should be more than ever interested in instituting such a department.

One of the most serious concerns of the administrator today is that of hospital publicity. At the last meeting of the American Hospital Association, held in Milwaukee in September, a whole session was devoted to the subject of hospital publicity. To my knowledge, there has been no previous time in the history of that organization when so much emphasis was placed on hospital publicity and the whole field of public relations. Some institutions are employing public relations men at good salaries, some are developing carefully thought out radio programs, while others are trying through personal contact to make the value of their institution known to

the Press. This trend has great significance for you. General hospital administrators are frankly making a bid for public favor. Where could they hope to find a more enthusiastic publicity agent than the satisfied, contented patient? What patient will not tell his friends and neighbors of happy hours spent in the hospital in the work shop, creating out of colorful materials some bit of attractive handwork? What patient will fail to advise his friends to go to ——— hospital because there, one can have some bedside occupation to help while away the weary days? In our own hospital, some of our ward maternity patients have been busily knitting sweaters for other mothers' babies, simply because they were used to lives of activity and could not accustom themselves to idleness. The happy patient is as powerful and inexpensive a form of hospital publicity as can be found, a fact that the administrator cannot afford to overlook.

Another good selling point to the hospital executive is the argument that occupational therapy, by facilitating recovery, reduces the number of hospital days per patient. I have always had more or less of a blind faith in this, but I do not recall ever having seen any figures on it. It seems to me that if you, as a professional group, could make a comparative study of the average length of hospital stay in two institutions that were similar from every other standpoint, and could discover an existing relationship between occupational therapy and the number of hospital days' stay per patient, you would have a most powerful tool with which to work. No hospital executive would label anything a frill that would reduce the cost per patient and release beds for greater service to the community.

But there is still another aspect of this whole problem that probably has more far-reaching implications than any yet discussed, and involves the entire relationship between the hospital and the community in which it is located. What does the hospital expect of the community, and what does the community expect of the hospital? If you will glance at the historical development of the hospital, you will find that it constitutes a series of changes in its social relationships, from the early seclusive institution that accepted the undesirables of society for custodial or domiciliary purposes, to the more scientific hospital that took in the acutely sick in order to cure them but without any concern for their health after they passed through the hospital door, to the modern, more socialized organization that is not only interested in curing, but takes steps to assure, insofar as possible, the permanency of that cure, and finally to the most progressive type of hospital that assumes as its further concern the prevention of disease, the promotion of health, and the general welfare of its patients. This modern type of hospital, we see, has a very definite community relationship. It assumes a responsibility for the health of its residents, and by

health is meant not the mere absence of disease, but that state of well-being that enables an individual to function normally in his usual environment.

We live in a civilization in which the major emphasis is centered around matters of economic concern—the business of making a living. It thus becomes the goal of the hospital to restore its patients to that state of health or well-being that will enable them to become economically useful. To be economically useful means, in its simplest terms, to be able to work, whether it be an outside job with a weekly pay envelope or a housewife's duties with or without a small spending allowance.

What about those of our patients who, through illness, have lost this ability to work? Are they not part of our responsibility?

Let me give you this illustration: Mr. X comes to our clinic. He is a tailor by trade, never earned much, managed to maintain his family on a minimum basis, but has never been able to accumulate any savings. Now our doctors tell him he has an overactive thyroid that is seriously affecting his general condition, and if he does not take care of it now, through rest and surgery, he will develop complications and permanently impair his health. "But how can I afford to give my job up?" is his first question. "There is no one to support my family." We help him get a long time view of his condition, and he consents to our plan. He gives up his job, comes into the hospital for a period of observation and rest, submits to surgery, and finally settles down to a long, stormy convalescence. In the meantime, he has placed his family on public subsidy, at our instigation and with our help. At first, he is uncomfortable about it, but later he settles down in serene complacency in the knowledge that someone is carrying his burdens. Prevented through illness from meeting his responsibilities as head of his household, he begins to feel inferior and inadequate, but soon finds compensation in the fact, that, after all, it is not his fault; it is because he is a sick man. And so he develops a new mental habit. Now he finds comfort in being ill; it is a way of escape. Eventually we tell him he may try to do some work. At the mere mention of it, his pulse quickens, his temperature rises, his heart begins to fibrillate and he breaks out in a heavy perspiration. Even his hands begin to shake. He couldn't think of working. For he knows intuitively, that as soon as he is pronounced fit to work, his relief will be cut off. Are we to close our story here? Is it fair for us to leave him at this point? We, who encouraged the man in the first place to learn habits of dependency—do we feel no responsibility in helping him learn habits of work? Do we have a feeling of a job carried through to completion—a job well done?

The story of Mr. X can be duplicated many times in any hospital with many variations. What is the solution to this problem?

It seems to me that there is a definite need for occupational therapy as a regular activity of the hospital. Attractive occupation, carefully selected according to the patient's physical and emotional needs, prescribed by a physician, supervised by a therapist, and housed in the protective atmosphere of a medical institution, free from the demands and competition of the industrial world, will soon reduce the druggist's bills for bromides. The patient will be gradually retrained to his former work habits. Little by little, he will regain confidence in himself, pride in the work he creates, and a feeling of satisfaction in his own strength and usefulness. If at all possible, he should be given some pay for the work he does, either from the sale of the articles or in the form of a weekly pay envelope, as this will serve to hasten his progress.

All of which brings me back to the point I made at the beginning of this paper—namely, that the economic crisis of the past few years should provide a tremendous stimulus and impetus for further growth of your work. Large blocks of our population have been living under continuous stress and strain for several years. Economic insecurity has been accompanied by constant fear and apprehension. For many, there has been a definite weakening in the emotional fabric. From widely separated parts of the country, simultaneously, there come reports that much of the clinic load is emotional rather than physical. All our clinics are carrying large numbers of psychoneurotics, patients with anxiety neuroses and gastric neuroses, and others, who for one reason or another have been accustomed to long dependency, all of whom are seeking refuge in the manifestations of diseases which they haven't got. When we add to these the usual cardiac, thyroid, and long-time orthopedic conditions, we find a considerable portion of our clinic load eligible for the work-shop, whether it be for physical correction, emotional adjustment, or both. The clinic workshop should be, as I see it, not for those patients who are so handicapped as to permanently require sheltered employment, but primarily for those patients who must re-learn how to work, or, in other words, for those who, through a period of industrial convalescence, can be nursed back to economic usefulness.

This is a difficult program. In order to be successful, it must be accompanied by administrative safeguards. Occupational therapy should be an integral part of the hospital set-up, as are x-ray, laboratory, dietary, and other departments. Its growth should come from within, rather than from without. The department that is established and supported entirely as the project of an outside organization is apt not to develop the same degree of effectiveness and professionalism that is demanded of the other departments in the hospital. It should be under the direction of a well trained, highly qualified, and competent person who has a fine understanding of

the relation of her work to the other departments in the institution, and who can effect good working relationships. Particularly important is the relationship with the nurse who administers the bedside care and manages the patient in the clinic, and the social worker who studies his occupational history, evaluates his emotional needs, knows his economic requirements, and helps him plan for the future. There has to be joint thinking, joint planning, and joint working. It is likewise important that the director be a good pioneer, one who can carry on a continuous publicity campaign, one who will seize every opportunity to inform the hospital personnel about her work.

May I repeat that not only is there a place for occupational therapy in the general acute hospital, but there is an urgent need of it. I should like to add my hope that you will witness early development in that direction.

The Graduate Nurse Situation in Detroit

THE NURSES' Central Directory supplying graduate nurses for private duty have had their waiting list cleared and, on one occasion within the past 30 days, have been unable to fill requests for 20 nurses in one day. Hospitals, welfare organizations, and industries in the city are having some difficulty in promptly obtaining sufficient graduate nurse personnel. Undoubtedly this is an emergency situation, as many of the nurses practicing in Detroit have not returned to the city from their homes in the country or Canada, to which they retired at the height of the depression.

Two hospitals in Detroit have raised the salaries of general duty and group nurses, as well as nurse supervisors, within the past 30 days. At least two other hospitals are discussing increases in wage schedules, effective April 1, 1934. One hospital in Detroit has restored all salaries and wages cut during the depression, except the initial 10% cut, after making adjustments due to changes in responsibility, the increase effective March 1, 1934.

This situation, which should obtain in many other cities with the return of industry and employment, may refute the argument of nurse educators that there is an excess of nurse graduates for normal times.

The 1934 Convention of the Western Hospital Association, Sacramento, California

MANY ADMINISTRATORS of country-wide reputation have been selected to contribute to a most interesting program of the Western Hospital Association, scheduled for April 9 to 13 at the Municipal Auditorium in Sacramento, California, the general theme of which is stated as "The New Era in Hospital Service." Joining with the Western association in its eighth annual conference are various nursing and public health organizations, as well as the Record Librarians of California and the California Chapter of American Physiotherapists' Association. The Dietetic Section of the association will hold its session on Tuesday, the 10th, with a luncheon address on "Uniform Cost Systems," following a business meeting in the morning, and in the afternoon a Round Table on dietetic problems.

The Monday sessions include the opening meeting of the House of Delegates and the opening general assembly meeting, Dr. J. Rollin French presiding, in the morning, with sectional and special meetings and a round table conference in the afternoon. Topics scheduled are: "Designing Adequate Medical and Hospital Service to Meet the Needs of All," by John H. Kingsbury, director, Milbank Memorial Fund, New York; "Necessity of Greater Coöperation between the Medical Profession, Hospitals, and Other Allied Professions," by Dr. Malcolm T. MacEachern, with response by Dr. N. W. Faxon and Miss Elnora Thomson. "Suggestions for Solutions of Economic Problems of Hospitals" is the general subject of the Round Table, to be presided over by Dr. R. C. Buerki, of Madison, Wisconsin. Those who will discuss the various phases of this general theme are John Pierce (California Taxpayers' Association), R. E. Heerman (California Hospital, Los Angeles), Dr. Walter Dickie (California Medical Association), T. F. Clark (San Francisco Community Chest), Ralph Walker (California Hospital), and Dr. B. W. Black (Alameda County Institutions).

A public meeting will be arranged for Monday evening.

On Tuesday morning Dr. Black will preside over a general assembly, with Dr. N. W. Faxon introducing the general topic—"Necessity for Changes in Hospital Systems." Suggestions as to "What Can and Should be Done" will be discussed from various points of view: the general economic point of view by Dr. Michael Davis, of the Julius Rosenwald Fund; the medical, by Dr. Fred Clarke, of Long Beach (Public Relations Committee, California Medical Association); the nursing, by Shirley Titus, of

Vanderbilt University, Nashville, Tenn.; and society's point of view by Archbishop Mitti, of San Francisco.

The Round Table Conference on Tuesday afternoon will be a continuation of the discussion of economic problems and will include such subjects as "A Model Lien Law," "State Insurance Commission Control of Periodic Payment Plans," "How to Cut Your Fire Insurance Costs," "Do Superintendents Have the Proper Commodity Knowledge Essential to Purchase?" and "The Hospital Formulary" from the standpoint of the physician in private practice and from the standpoint of hospital administration. Mr. G. Waite Curtis (San Francisco), Ellard L. Slack (Samuel Merritt Hospital, Oakland), Dr. Eric Liljencrantz (Oakland), and George Wood (Peralta Hospital, Oakland) are among those who will present the topics.

Mr. Paul Fesler will preside over the general assembly on Wednesday morning, and the program will be a study of "The Relation of Community Health to the National Recovery Program," again from numerous points of view, the speakers to be Dr. C. Rufus Rorem, of the Julius Rosenwald Fund, William P. Shepard (Metropolitan Life Insurance Company), Senator Edward H. Tickle, Sister John Gabriel (Sisters of Charity of Providence in the Northwest), and Dr. Charles A. Dukes, chairman, Public Relations Committee, California Medical Association.

The speakers for the afternoon sessions are Mr. J. V. Buck, vice-president of the Western Hospital Association; H. S. Barnes, Salt Lake City; Miss Carolyn E. Davis, Portland, Oregon; Dr. L. B. Rogers, Los Angeles; Dr. Rexwald Brown, Santa Barbara; Dr. Rodney Yoell, San Francisco; and Dr. Daniel Crosby, Oakland. There are three general topics—"The Value of Local Hospital Councils in Developing Protection and Balancing Community Hospital Service," "Group Practices," and "Compulsory Health Insurance."

The closing day's sessions schedule addresses as follows: "Hospital Relations with Non-Professional Personnel" by W. P. Butler, San Jose Hospital; "Superintendents of Tax-supported Institutions," Dr. C. E. Sisson, San Diego General Hospital (a sectional meeting); "The Times and the Doctor," Dr. Glenn Myers (Public Health League of California); "Tax-supported Hospital Service," Dr. B. W. Black; "The Place of the Voluntary Hospital in the Community," Rev. Alphonse M. Schwitalla, S.J.

The Record Librarians will meet sectionally on three mornings, joining with the Western association in its general assemblies. The association's Auxiliary Section will present its program on women's auxiliaries and hospital aids on Tuesday, and on the final afternoon there will be a general session in charge of the public health nurses.

The Western association announces three informal breakfast meetings on each of three mornings, a banquet on Tuesday evening, to which the allied organizations are invited, and a boat trip up the Sacramento River on Wednesday evening.

The meetings of the Western Hospital Association have always attracted a large attendance and they have been characterized by interesting and instructive programs. Hospital people should avail themselves of the opportunity of participating in this great conference. The president of the Western association, Dr. J. Rollin French, and the committee in charge of the convention arrangements have arranged every detail for the comfort and entertainment of the guests of the various associations meeting in Sacramento at this time. It will be one of the best attended and most successful hospital conferences that will be held in 1934.

The Texas State Hospital Association
Temple, Texas, March 23-24

For the fifth successive year the Texas State Hospital Association met in conference. The sessions opened on Friday morning at the Temple Municipal Auditorium.

The following subjects were presented for the consideration of the convention: "Social Service—A Financial Asset to the Hospital" by Dr. Lucius Wilson, John Sealy Hospital, Galveston; "The Superintendent's Relation to the Personnel" by Mr. Robert Jolly, president-elect of the American Hospital Association, Houston; "Some of the Adjustments that Have to be Made in Hospitals" by Miss Ola McClosky, Bradford Memorial Hospital, Dallas; "Some Educational Problems in Small Schools of Nursing in Texas," by Mrs. Grace Engblad, president, State Board of Nurses' Examiners.

At the afternoon sessions the president of the Texas Hospital Association, Dr. J. H. Stephenson, addressed the meeting on "The Value of the Hospital Council." Other subjects presented were: "The Central Diet Service as Operated at Hermann Hospital" by Miss Mamie Ruth Harris, Houston; "Hospital Laws of Today and Legislation that Is Needed for the Protection of Hospitals," Philip Overton, Dallas; "The Record Highway," Miss May Smith, Bradford Memorial Hospital, Dallas; "The Vari-

ous Types of Hospitalization in Texas," Mrs. Martha Roberson, Medical and Surgical Hospital, San Antonio.

At the annual banquet on Friday evening, Dr. J. H. Stephenson presided as toastmaster, and Dr. Caldwell told the conference what the American Hospital Association is doing for Texas hospitals. Upon adjournment of the banquet a public meeting was held at the Municipal Auditorium and was addressed by Dr. E. H. Carey of Dallas, a past president of the American Medical Association. His subject was "The Hospital Is the People's Friend."

At the Saturday session the following subjects were discussed: "Public Relations," "Collections and Credit" by Mr. W. V. Jarratt; "Medicine Charges and Their Relation to the Satisfied Patient," Mrs. Alice Taylor, All Saints Episcopal Hospital, Fort Worth; "How the Small Hospital Fills the Need in Its Community," Dr. Richard Sealy, Sealy Hospital, Santa Anna; "Postgraduate Education: Its Cost, Its Benefit," Mrs. Helen Lehman, Baylor University Hospital, Dallas; "Some Methods Used in Filing Records," Miss Josephine Nichols, Parkland Hospital, Dallas.

The Texas conference had a registration of 260, representing over 280 hospitals.

Four Southern State Associations To Meet on May 7

A joint meeting of the hospital associations of Arkansas, Louisiana, Mississippi, and Tennessee will be held on May 7 at Natchez, Mississippi.

Meeting of the American Heart Association

The tenth scientific session of the American Heart Association will be held on Tuesday, June 12, 1934, from 9:30 A.M. to 5:30 P.M. at the Cleveland Hotel, Cleveland, Ohio. The program will be devoted to arteriosclerotic heart disease.

TOURO INFIRMARY has received the sum of $200,000 from Mr. Lazare Bloch, as a memorial to his wife, to reconstruct the public wards, provide a new building, and establish a memorial fund for charitable purposes.

Applications for Institutional Membership

December 28, 1933, to March 27, 1934

California

Florence Crittenton Home.....Los Angeles

District of Columbia

Garfield Memorial Hospital.....Washington

Illinois

Alice Home Hospital.....Lake Forest
Culbertson Hospital.....Rushville
J. C. Hammond City Hospital.....Geneseo

Iowa

Lutheran Hospital of Fort Dodge.....Fort Dodge
Mary Frances Skiff Memorial Hospital.....Newton

Kansas

Concordia Hospital .....Concordia
The Security Benefit Home and Hospital Association.....Topeka

Kentucky

Illinois Central Hospital.....Paducah

Louisiana

Illinois Central Hospital.....New Orleans

Michigan

City Hospital.....South Haven
Gerber Memorial Hospital.....Fremont

Nebraska

Reeves Memorial Hospital.....Farnam

New York

Mercy Hospital.....Buffalo

Pennsylvania

Gemmill Hospital.....Monessen

West Virginia

Grace Hospital.....Welch
Williamson Memorial Hospital.....Williamson

Applications for Personal Membership

December 28, 1933, to March 27, 1934

Colorado

Epler, Crum, M.D., supt., Woodcroft Hospital, Pueblo.
Erb, Rev. Allen H., supt., Mennonite Hospital and Sanitarium, La Junta.
Pixley, Helen K., R.N., Parkview Hospital, Pueblo.
Raphael, Sister M., R.N., supt., Mercy Hospital, Durango.
Smith, Mary K., R.N., dir. nrs., Beth-El General Hospital, Colorado Springs.
Witke, Irmela M., R.N., supt. and supt. nrs., Parkview Hospital, Pueblo.

Georgia

Fritchman, Marguerite, asst. cashier, Georgia Baptist Hospital, Atlanta.
Snoke, John H., M.D., supt., University Hospital, Augusta.

Illinois

Abernethy, A. E., supt., Lake View Hospital, Chicago.
Barrett, Rev. John W., dir., Catholic Hospitals for Archdiocese of Chicago, Chicago.
Brooks, Margaret V., supt., Moline Public Hospital, Moline.
Combs, E. S., dir. of finance, Methodist Hospital of Central Illinois, Peoria.
Dinsmore, John C., dir., University Clinics, Chicago.
Gruenewald, Rev. M. J., chaplain, St. Elizabeth's Hospital, Belleville.
McCarthy, F. J., bus. mgr., Berwyn Hospital, Berwyn.
Ploeger, Millie E., supt., Evangelical Deaconess Hospital, Freeport.

Indiana

Biermann, Helen, supt., Witham Memorial Hospital, Lebanon.
Hogue, Caroline, R.N., supt., Woodlawn Hospital, Rochester.
Luckey, R. C., M.D., owner, Luckey Hospital, Wolf Lake.
Nickels, Rev. J. M., St. Peter and Paul Rectory, Turkey Creek.

Iowa

Henry, Mabel, R.N., supt., W. C. Graham Protestant Hospital, Keokuk.

Kentucky

Benigna, Sister M., R.N., supt., St. Joseph's Infirmary, Louisville.
Brock, Benjamin L., M.D., med. dir., Waverley Hills Sanatorium, Waverley Hills.
Dunn, Wm. A., trustee, Good Samaritan Hospital, Lexington.
Ferdinanda, Sister Mary, supt., St. Elizabeth Hospital, Covington.
Haase, Lydia M., supt., T. J. Samson Community Hospital, Glasgow.
Harnett, Mary Frances, supt., Clark County Hospital, Winchester.

Kissling, Bertha A., supt., Methodist Hospital, Pikeville.
Merritt, Mary E., R.N., supt., Red Cross Hospital, Louisville.
Turner, Paul A., M.D., supt., Kentucky State Tuberculosis Sanatorium, Louisville.

Massachusetts

Bigelow, George H., M.D., dir., Massachusetts General Hospital, Boston.
Morrison, M. Emilie, supt., Corey Hill Hospital, Brookline.
Ward, E. St. John, M.D., supt. and phys., The Hospital Cottages for Children, Baldwinville.
Watson, Margaret M., R.N., supt., Shriners' Hospital for Crippled Children, Springfield.

Michigan

Bertille, Sister M., supt., St. Joseph's Mercy Hospital, Ann Arbor.
Dickison, Emma B., R.N., supt., Chippewa County War Memorial Hospital, Sault Ste. Marie.

Minnesota

Adams, Van C., College Apts., Rochester.
Hunt, Roscoe C., M.D., supt. and owner, Fairmont Hospital, Fairmont.

New Jersey

Ayer, Le Roi A., controller, Cooper Hospital, Camden.
Schilling, Elizabeth, R.N., supt., Irvington General Hospital, Irvington.

New York

Greenberg, Henry, M.D., supt., Fordham Hospital, New York.
Kogel, Marcus D., M.D., deputy med. supt., Cumberland Hospital, Brooklyn.
Sinclair, Clara F., R.N., supt., Saratoga Hospital, Saratoga Springs.

North Carolina

Lowery, J. R., M.D., owner and mgr., Lowery Hospital, Salisbury.

Ohio

Cherrington, John S., M.D., supt., Cherrington Hospital, Logan.
Clement, Ernest P., M.D., supt., Elyria Clinic Hospital, Elyria.
Craig, Eva, R.N., supt., People's Hospital, Akron.
Florian, Sister Marie, supt., San Antonio Hospital, Kenton.
Keemer, Estella M., R.N., supt., Portsmouth General Hospital, Portsmouth.
Miller, Mrs. Ada, R.N., supt., City Hospital, Bellaire.
Strong, W. H., bus. mgr., Good Samaritan Hospital, Sandusky.
Swan, George F., M.D., med. dir., Swan Hospital, Cambridge.
Young, Kathleen F., R.N., supt. nrs., Grant Hospital, Columbus.

Pennsylvania

Bruce, D. Scott, mgr., York Hospital, York.
Gemmill, W. D., M.D., supt., Gemmill Hospital, Monessen.
Parkinson, William N., M.D., med. dir., Temple University Hospital, Philadelphia.

Rhode Island

Palmer, Ellen B., bus. mgr., Emma Pendleton Bradley Home, East Providence.

Texas

Twitty, Bryce L., supt., Baylor University Hospital, Dallas.

Washington

Gabriel, Sister John, hosp. consultant and ed. dir., House of Providence, Seattle.

Wisconsin

Coon, Harold M., M.D., assoc. med. dir., River Pines Sanatorium, Stevens Point.

Canada

Rowan, Georgie L., R.N., supt., Grace Division, Toronto Western Hospital, Toronto, Ont.

THE NEW YORK Polyclinic Medical School and Hospital has recently opened a physical therapy department in the new clinic building of the hospital. It is under the direction of Dr. Richard Kovacs.

A Business Directory for 1934

The American Hospital Association takes a great deal of pleasure in presenting this directory of manufacturers and commercial firms enjoying the patronage of the hospital field. This list has been carefully selected and contains the names and addresses of firms which, for many years past, have served the hospital field. Their business relationships have always been maintained on the highest plane. The quality of their merchandise has been equal or superior to the merchandise of the best of their competitors. They are the leading manufacturers and dealers in hospital equipment and supplies in the United States.

Further, these firms have shown their interest in and friendship for hospitals repeatedly. They have extended to the American Hospital Association as well as to the entire hospital field their moral and material support. In recommending these firms to the consideration and patronage of hospitals, the American Hospital Association feels that it is making a distinct contribution to better business relationships between our institutions and the manufacturers and business people from whom the hospitals purchase their supplies.

It is the finest possible commentary on the business methods of these firms that for the past five years there has not reached this office a single complaint on the part of any institution concerning any one of them.

ACME COTTON PRODUCTS CO., INC.

Absorbent Cotton, Gauze, and Surgical Dressings

245 Fifth Avenue New York City

E. E. ALLEY CO., INC.

Complete Line of Name Woven Bed Spreads, Blankets, and Towels

39 White Street New York City

ALTRO WORK SHOPS, INC.

All Types of Hospital Garments

1021 Jennings Street, New York City

ALUMINUM COMPANY OF AMERICA

Alcoa Aluminum Chairs

2400 Oliver Building, Pittsburgh, Pa.

ALUMINUM COOKING UTENSIL COMPANY

"Wear-Ever" Aluminum Cooking Utensils

New Kensington, Pa.

AMERICAN DISTRICT TELEGRAPH COMPANY

Fire Detection and Control Apparatus

155 Sixth Avenue New York City

AMERICAN HOSPITAL SUPPLY COMPANY

"Oxygenaire"
Dealers in All Hospital Supplies

15 N. Jefferson St. Chicago, Ill. 108 E. Sixth St. Pittsburgh, Pa.

THE AMERICAN JOURNAL OF NURSING

450 Seventh Avenue, New York City

AMERICAN LAUNDRY MACHINERY COMPANY

Complete Line of Laundry Machinery and Equipment

Norwood Station Cincinnati, Ohio

AMERICAN STERILIZER COMPANY

The "American" Kny-Scheerer Obstetrical Operating Table and Delivery Bed—Complete Sterilizing Equipment

Erie, Penna.

AMERICAN SURGICAL LAMP COMPANY

Operating Room Lamps

779 N. Water St. Milwaukee, Wis.

ANGELICA JACKET COMPANY

Nurses' Uniforms, Capes, and a Complete Line of Hospital Garments

1419 Olive Street St. Louis, Mo.

APPLEGATE CHEMICAL COMPANY

Indelible Inks and Markers for Marking Hospital Linens

5632 Harper Avenue Chicago, Ill.

AZNOE'S CENTRAL REGISTRY

Registry for Hospital Administrators, Physicians and Nurses

30 N. Michigan Avenue, Chicago, Ill.

H. W. BAKER LINEN COMPANY

Complete Line of Hospital Linens

315 Church Street New York, N. Y.

BARCALO MANUFACTURING COMPANY

Metal Hospital and Institutional Beds, Mattresses, Springs, Pillows, and Metal Furniture

225 Louisiana St. Buffalo, N. Y.

BARD-PARKER CO., INC.

Surgical Knives — Detachable Blades

Danbury, Conn.

THE BASSICK COMPANY

Full Line of Institutional Casters

Bridgeport, Conn.

THE BECK DUPLICATOR CO.

"The Speedograph" Duplicating Machine

18 W. 18th Street New York City

BECTON, DICKINSON & CO.

B-D Hospital Thermometers, Syringes, Needles, and Hospital Specialties

Rutherford, N. J.

THE BI SO DOL COMPANY, INC.

"BiSoDol" the Antacid Digestant

130 Bristol Street, New Haven, Conn.

G. S. BLAKESLEE & COMPANY

Food Mixing Machines Dishwashers

1900 S. 52nd Avenue Chicago, Ill.

BURROUGHS ADDING MACHINE CO.

Adding, Bookkeeping, Billing, Calculating, and Cash Machines Chairs and Typewriters

6595 Second Blvd. Detroit, Mich.

THE BURROWS COMPANY

A Full Line of Hospital Supplies

325 W. Huron Street Chicago, Ill.

CAROLINA ABSORBENT COTTON CO.

Absorbent Cotton, Gauze, Surgical Dressings, Blankets, and a Complete Line of Hospital Linens

P. O. Box 596 Charlotte, N. Car.

J. & J. CASH, Inc.

Woven Names and Initial Linen Marking Letters — Bath Towels, Gloves and Wash Cloths

220 South Chestnut Street
South Norwalk, Conn.

S. J. CASPER CO., INC.

Hotel and Restaurant Equipment and Utensils

845 Plankinton Ave., Milwaukee, Wis.

WILMOT CASTLE COMPANY

"Castle" Sterilizers

1255 University Ave., Rochester, N.Y.

CELOTEX COMPANY

Acousti-Celotex Sound Absorbing Materials

919 N. Michigan Ave. Chicago, Ill.

CHAMBERLIN METAL WEATHER STRIP CO.

Metal Weather Stripping

1644 Lafay'te Bl. Detroit
513 E. Mason St. Milwaukee

CHAMPION DISH WASHING MACHINE CO.

Dishwashing Machines

311 State Street Erie, Pa.

THE CHENEY CHEMICAL COMPANY

Oxygen Tents
Anesthetic Gases and Equipment

Cleveland, Ohio Toronto, Can.

CLARK LINEN COMPANY

Full Line of Bedding
Blankets and Linens

307 W. Monroe St. Chicago, Ill.

CLIMAX RUBBER COMPANY

Healthgard Antiseptic and Anti-acid Hospital Sheeting

1350 Broadway New York City

COLGATE PALMOLIVE PEET COMPANY

Palmolive Soap

Palmolive Bldg. Chicago, Ill.

WARREN E. COLLINS, INC.

Drinker Respirators — Roth-Barach Oxygen Tent, Metabolism Apparatus

555 Huntington Ave. Boston, Mass.

THE COLSON COMPANY

Full Line of Wheel Stretchers, Chairs, Trucks, Casters, Wheels, Canvas Baskets, Food Conveyors

Elyria, Ohio

COLT'S PATENT FIRE ARMS MFG. CO.

Autosan Dish and Silver Cleaning Machines

Hartford, Conn.

CONTINENTAL CAR-NA-VAR CORPORATION

Car-Na-Var Floor Treatment Compounds

Brazil, Ind.

CONNECTICUT TELEPHONE & ELECTRIC CORP.

Signal Systems and Interior Telephones

Meriden, Conn.

CRANE COMPANY

Hospital Plumbing Fixtures

836 S. Michigan Ave. Chicago, Ill.

DAVIES & SULLIVAN COMPANY

Coffee — Tea

149 Front St. New York City

F. A. DAVIS COMPANY

Publishers of Medical and Nursing Books

1914 Cherry St. Philadelphia, Pa.

R. B. DAVIS COMPANY

Cocomalt

Hoboken, N. J.

DAVIS & GECK, INC.

D & G Sutures

211-221 Duffield St., Brooklyn, N. Y.

J. A. DEKNATEL & SON, INC.

The Nursery Name Necklace
Morgenthaler Bed (Incubator)
Suture and Ligature Materials

96-20 222nd Street
Queens Village, L. I., N. Y.

DENOYER-GEPPERT CO.

Anatomical Models — Charts
Skeletons — Slides

5235 Ravenswood Ave., Chicago, Ill.

DePUY MANUFACTURING COMPANY

Overhead Extension Frame
Extension Leg Splints
Fracture Appliances

Warsaw, Indiana

DETROIT-MICHIGAN STOVE COMPANY

Garland Heavy Duty Ranges and Broilers

6900 Jefferson Ave., East
Detroit, Mich.

DETROIT STEEL PRODUCTS COMPANY

Steel Windows and Equipment

2250 E. Grand Blvd. Detroit, Mich.

ARCHIBALD W. DIACK

Sterilizer Controls

5533 Woodward Ave., Detroit, Mich.

DICTOGRAPH PRODUCTS CO., INC.

Signal Phone Systems
Soft-tone Loud Speaking
Bedside Telephones

580 Fifth Avenue New York City

HENRY A. DIX & SONS CORPORATION

Nurses' Uniforms

141 Madison Avenue New York City

THE DRY MILK COMPANY

"Dryco"—Infant Diet Material

205 E. 42nd Street New York City

DOEHLER FURNITURE CO., INC.

Metal Furniture

386 Fourth Avenue New York City

H. D. DOUGHERTY & COMPANY

Complete Line of Beds and Steel Furniture

17th Street and Indiana Avenue
Philadelphia, Pa.

THE DURIRON CO., INC.

Acid-Proof Drainage and Ventilating Equipment

P. O. Box 1019 Dayton, Ohio

EASTMAN KODAK COMPANY

X-Ray Supplies
Motion Picture Supplies and Equipment

Rochester, New York

EDISON GENERAL ELECTRIC APPLIANCE CO.

Electric Cooking Equipment

5662 W. Taylor St. Chicago, Ill.

EISELE & COMPANY

Clinical Thermometers
Hypodermic Needles and Syringes

400 First Ave., N. Nashville, Tenn.

J. H. EMERSON

Emerson Diaphragm Respirators
Portable Oxygen Tents
Scientific Research Apparatus

15 Brattle St. Cambridge, Mass.

FAICHNEY INSTRUMENT CORPORATION

Clinical Thermometers
Surgical Instruments
Hypodermic Needles and Syringes

Watertown, N. Y.

FAULTLESS CASTER COMPANY

A Full Line of Wheels and Casters

Evansville, Indiana

THE FENGEL CORPORATION

Dealers in Hospital, Surgical, and Laboratory Supplies

239 Fourth Ave. New York City

JOHN W. FILLMAN COMPANY

Hospital Linens, Blankets and Gowns

1020 Filbert St. Philadelphia, Pa.

FINNELL SYSTEM, INC.

Finnell Noiseless Floor Machines

Elkhart, Indiana

THE J. B. FORD COMPANY

"Wyandotte" Cleaners and Cleansers

Wyandotte, Mich.

THE FOREGGER CO., INC.

Anesthesia Apparatus
Oxygen Therapy and Resuscitation Apparatus

47 W. 42nd St. New York City

GENERAL ELECTRIC X-RAY CORPORATION

X-Ray and Physiotherapy Equipment
Hawley-Scanlan Fracture Table
Hawley Fracture Bed

2012 W. Jackson Blvd., Chicago, Ill.

GENERAL FOODS CORPORATION

"Post's" Food Products

250 Park Avenue New York City

GERBER PRODUCTS
DIVISION
FREMONT CANNING CO.
Gerber's Cereal and Strained Vegetables
Fremont, Mich.

THE GERSON-STEWART CORPORATION
Soaps and Floor Maintenance Supplies
Buckeye and Lisbon Roads
Cleveland, Ohio

GLASCO PRODUCTS COMPANY
Complete Line of Laboratory Glassware for the Health and Testing Laboratory
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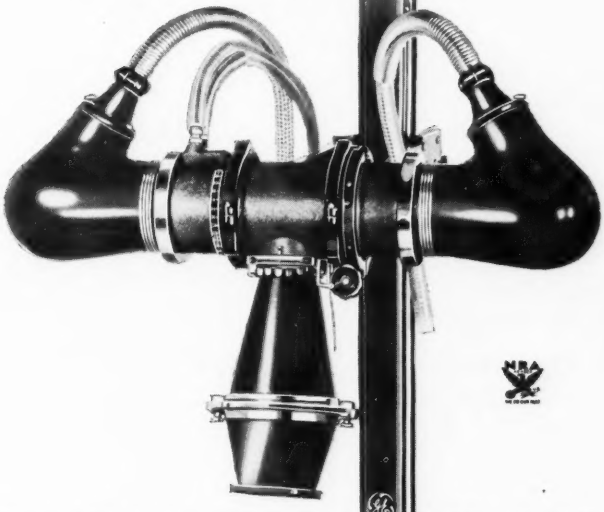

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Rev. Clinton F. Smith Goes to University of Iowa Hospitals as Assistant to Robert E. Neff

Rev. Clinton F. Smith, who since 1926 has been superintendent of the Allen Memorial Hospital at Waterloo, Iowa, and who is president of the Iowa Hospital Association, has accepted an appointment as assistant to the administrator, Robert E. Neff, of the University of Iowa Hospitals, Iowa City.

Dr. Knowlton T. Redfield, who for the past several years has been superintendent of the Jefferson Hospital, Roanoke, Virginia, has been appointed superintendent of the Norfolk Protestant Hospital at Norfolk. Dr. Redfield will take over his new responsibilities as soon as his successor at Jefferson Hospital has been appointed.

Dr. J. B. Copeland has succeeded Mrs. Saidee N. Hausmann as superintendent of the Robert B. Green Memorial Hospital, San Antonio, Texas.

Dr. Charles L. Clay, formerly assistant superintendent of Peter Bent Brigham Hospital, Boston, has been appointed medical director of Long Island Hospital, Boston Harbor, Mass.

Dr. Charles C. Hedges, who has been assistant superintendent at Johns Hopkins, Baltimore, and superintendent of Babies Hospital, New York, is now superintendent of the Roosevelt Hospital in New York.

Dr. J. T. Redwine has been appointed superintendent of the Michigan Farm Colony for Epileptics, at Wahjamega.

J. H. Mitchell is superintendent of the Colonial Hospital, Rochester, Minnesota.

Smith Hagaman has been appointed superintendent of the North Carolina Baptist Hospital, Winston-Salem.

Mrs. Eleanor R. Chapman has been appointed superintendent of the Hospital of the Good Samaritan, Los Angeles, to succeed Mrs. Horatio Walker, resigned.

DEATHS

Rev. George T. Lumpkin, superintendent, North Carolina Baptist Hospital, Winston-Salem.

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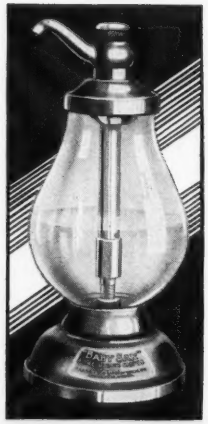

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*Nielsen, D., Higgins, J. A., and Spruth, H. C., "A Comparative Study on Hypnotics of the Barbituric Acid Series," Jour. Pharmacol. & Exper. Therap. 1926, XXVI, 371.

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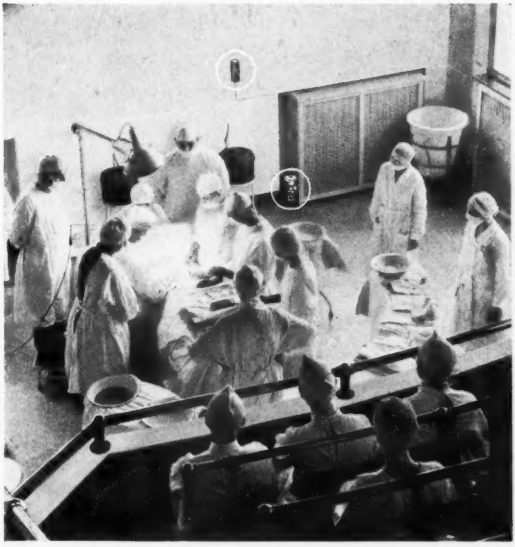

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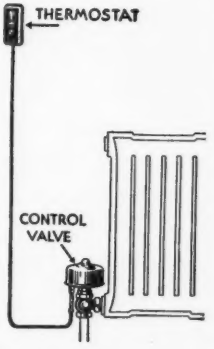

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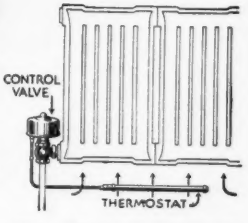

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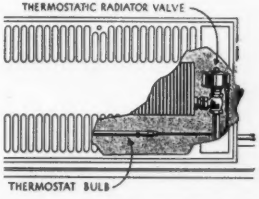

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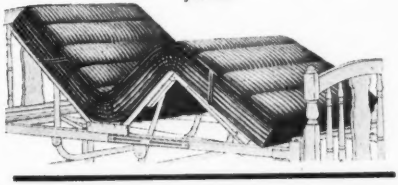

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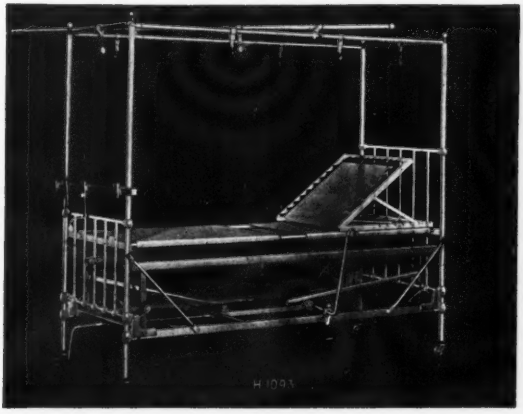

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Alabama Hospital Association, Birmingham, April 17.

Joint Conference—Ohio, West Virginia, and Kentucky Hospital Associations, Cincinnati, April 17-19.

Joint Conference—North Carolina, Virginia, and South Carolina Hospital Associations, Charlotte, N. Car., April 18-20.

Southern Methodist Hospital Association, Jackson, Miss., April 23-24.

Biennial Nursing Convention, Washington, D. C., April 23-27.

Iowa Hospital Association, Council Bluffs, April 30-May 1.

Joint Conference—Illinois, Indiana, and Wisconsin Hospital Associations, Chicago, May 3-5.

Joint Conference—Arkansas, Tennessee, Louisiana, and Mississippi Hospital Associations, Natchez, Miss., May 7.

Michigan Hospital Association, Detroit, May 24-25.

Minnesota Hospital Association, Rochester, May 24-25.

Hospital Association of New York State, New York City, May 24-25.

Midwest Hospital Association, Tulsa, May 25-26.

Missouri Hospital Association, Tulsa, May 25-26.

Hospital Association of Nova Scotia and Prince Edward Island, Charlottetown, P. E. I., June.

American Medical Association, Cleveland, June 11-15.

American Heart Association, Cleveland, June 12.

Catholic Hospital Association, Cleveland, June 18-22.

American Public Health Association, Pasadena, September 3-7.

American Protestant Hospital Association, Philadelphia, September 21-24.

American Hospital Association, Philadelphia, September 24-28.

American Occupational Therapy Association, Philadelphia, September 24-28.

National Association of Nurse Anesthetists, Philadelphia, September 24-28.

American College of Surgeons, Boston, October 15-19.

Ontario Hospital Association, Toronto, October 24-26.

Kansas Hospital Association, Newton, October 27.

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